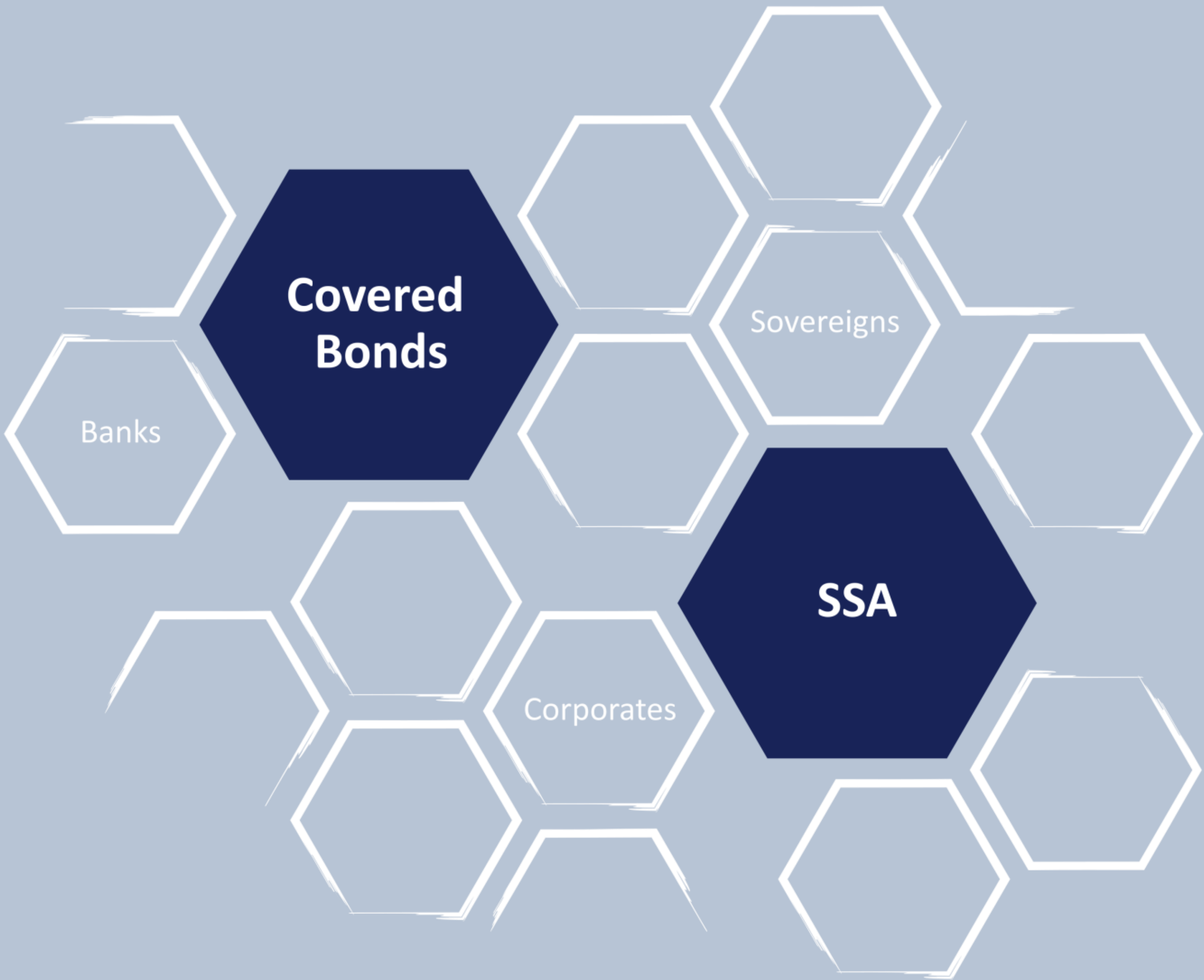

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

23 June 2021 ♦ 22/2021

Investment strategy recommendation and marketing communication
(see disclaimer on the last pages)

Agenda

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NORD/LB

Market overview
Covered Bonds

Authors: Henning Walten, CIIA // Dr Frederik Kunze

Hypo NOE provides only new deal

After no new issues were recorded last week, there has been one primary market deal in the past five trading days. Last Wednesday, Hypo NOE went to the market with a EUR 500m bond (WNG) placed at ms +5bp. The guidance for the 10Y bond was three basis points wider at ms +8bp area. With a bid-to-cover ratio of 1.2, the deal also fits into a market landscape which has recently seen very few significantly oversubscribed deals. This was the 11th benchmark bond for the Austrians, who have been issuing their EUR benchmarks as soft bullet bonds since 2017. Moreover, the bank has been active in this segment every year since 2011 with the exception of 2016. At 47%, the majority of the bonds secured on public sector assets remained in the domestic market, with an additional 35% going to German investors. Smaller percentages were attributable to buyers from the Nordic countries (7%), Benelux states (5%) and Asia (3%). In terms of investor type, banks dominated (45%), followed by central banks/official institutions (31%) and asset managers/funds (24%). The low volume of primary market supply in the last two weeks is also likely to be an early sign of the traditional issuance lull over the summer months. While the final bond before the summer break last year was placed in the market on 8 July, the last deal of 2019 was on 16 July, although general market activity was much more pronounced that year. We are therefore no longer expecting overly lively issuance activity in the coming weeks. Experience shows, however, that some deals make their way to the market again as of mid/end August, thereby bringing the summer lull to a close.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Hypo NOE	AT	16.06	AT0000A2RY95	10.0y	0.50bn	ms +5bp	- / Aa1 / -	-

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research, (Rating: Fitch / Moody's / S&P)

Another GBP deal from CIBC

The Canadian Imperial Bank of Commerce (CIBC) also issued a GBP denominated benchmark on 16 June. The 5-year GBP 1.25bn deal was initially marketed at SONIA +32bp area and was finally priced four basis points tighter at SONIA +28bp. The bank was last active in this segment in October 2019. The deal is part of a trio of GBP Benchmarks (together with TSB Bank and the Bank of Nova Scotia) issued since 11 June, with GBP deals overtaking EUR benchmarks, at least temporarily, in the last two trading weeks. In total, GBP 5.05bn has already been placed via GBP denominated benchmark bonds in 2021 to date. For 2020 as a whole, the corresponding figure was GBP 7.85bn, with GBP 6.35bn of this being placed in the market right at the start of the year in January.

ECB on the strategic review, movement in house prices during the pandemic…

Last weekend, the ECB Council met in person for the first time since March 2020 to discuss the future strategic direction of the central bank's monetary policy in detail. The corresponding press release revealed that no decisions or interim results would be made available to the public. However, against the backdrop of the current inflation debate as well, we are indeed expecting notable adjustments to monetary policy. These are set to also include different parameters with regard to the inflation target for consumer prices. Unsurprisingly, credibility and the anchoring of inflation expectations are once again likely to be very important for the central bankers in Frankfurt. The ECB has also recently assessed the movement in prices in the real estate market in the eurozone during the coronavirus pandemic. The report published in the Economic Bulletin points to a robust market during crisis year 2020, with a year on year rise in Q4 2020 of 5.8%, which is also the biggest increase since mid-2007. The analysis also shows that the Covid-19 crisis differs from the global financial crisis in that income and employment in the eurozone were in relatively good shape. Consequently there were no price slumps, but a great deal of growth instead. With a share of 73%, Germany, France and the Netherlands alone accounted for more than two thirds of this growth (in Q4 2020), meaning that the three countries have made a disproportionately large contribution to the increase. On the whole, the robust real estate prices were attributable to a range of factors. The lockdown constrained construction activity and consequently supply. Payment holidays also cushioned payment disruptions resulting from income losses, while interest rates for new financing were historically low.

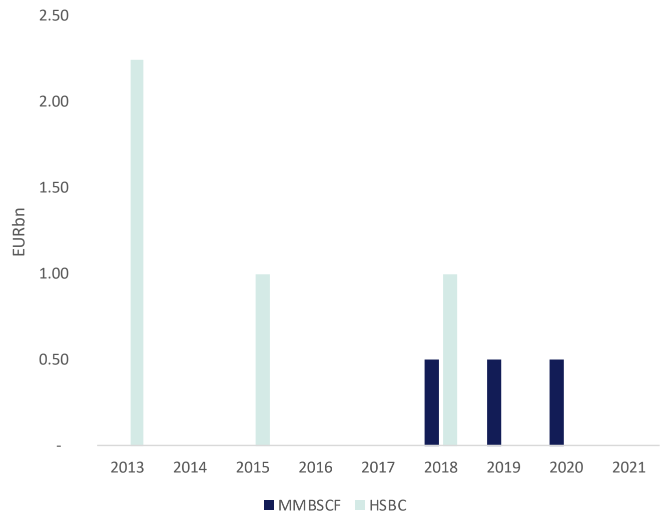
…as well as temporary leverage ratio relief and ongoing market challenges

There is also demand from investors looking for investment alternatives in the prevailing yield environment. Overall, the report concludes that real estate markets are robust across jurisdictions and segments. At the same time however, the momentum is also dependent on the favourable financing modalities and potential uncertainty regarding the progress of the pandemic. In our opinion, the fact that the regulatory relief for the banking sector is being maintained shows that the crisis is not yet over. For example, the ECB recently advised that the ECB Council agreed with the ECB banking regulator that the "exceptional circumstances" justifying leverage ratio relief continue to apply (see press release dated 18 June 2021). In a corresponding press release, the ECB in its role of banking regulator announced an extension of the relief, which permits claims on the central bank to be excluded from the leverage ratio, until the end of March 2022. (The relief granted in September 2020 had previously been set to expire on 27 June 2021; see also ECB/2021/27 dated 18 June 2021). As stated above, this decision reflects the assessment by the ECB monetary policy decision makers and ECB regulator that the crisis is not yet behind us and that the end date was selected in line with monetary policy measures in the context of the Covid-19 pandemic.

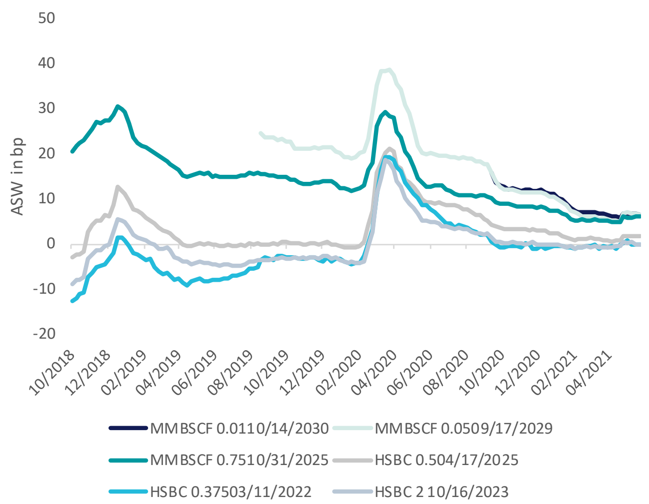
France: HSBC says au revoir to HSBC SFH

There are changes ahead in terms of issuers in the market for French covered bonds. My Money Group and HSBC Continental Europe (HBCE) have signed a Memorandum of Understanding (MoU) in which they agree that My Money Group will take over HBCE's French retail business (see My Money Bank press release dated 18 June 2021). The takeover package also includes HSBC SFH's covered bond programme (Bloomberg ticker: HSBC). As of the reporting date 31 March 2021, this covered bond programme had cover assets of EUR 4bn exclusively attributable to France. The issuer currently also has three outstanding EUR benchmarks with a total volume of EUR 3.25bn, whereby two bonds have a residual maturity of more than one year and are therefore represented in the iBoxx EUR Covered. Issuer My Money Bank SCF (MMBSCF) also has three outstanding EUR benchmarks with a total volume of EUR 1.5bn (all included in the iBoxx EUR Covered) and made its debut in the EUR benchmark segment in October 2018. As of 31 March 2021, the cover pool totalled EUR 1.955bn, with all cover assets of French origin. This data highlights the notable growth by this issuer since it became active in the market in 2018. In terms of the outstanding volume, its share of France's overall market remains modest at 2.2%. With regard to the implications of a successful takeover of HSBC SFH by MMB SCF, movement in spreads is very possible, whereby we assume that the ASW spreads of the outstanding bonds should move closer to one another. However, it should be noted here that the outstanding bonds have differing maturity profiles (shortest bond MMB SCF: 4.4 years; longest HSBC SFH bond: 3.8 years).

Issuance over time HSBC SFH and MMB SCF (EUR BMK)



Movement in spreads: MMB SCF and HSBC SFH (EUR BMK)



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

European Commission wants to establish a standard for 'European green bonds'

The European Commission is going to establish a concrete standard in the market for green bonds based on the existing taxonomy for sustainable bonds. According to press releases, the corresponding draft for an EU regulation is set to be presented at the start of July. This is set to contain numerous criteria for green bonds, with compliance entitling the issuer to use the term 'European green bonds' for their bonds. Like the requirements in the taxonomy, the Standard is set to be voluntary and bonds that do not meet the criteria may continue to be designated as green bonds. More specifically, the aims of the criteria for European green bonds include pursuing certain environmental goals and above all ensuring that these are not prejudiced. One of the reasons for the EU to have its own green bond label is likely to be the fact that, among other aspects, the criteria in the context of the ICMA Green Bond Principles (see Covered Bond & SSA View dated 16 June) do not adequately meet the desired requirements. Even though a label for sustainable bonds (in this case green bonds) is to be viewed as positive in principle, we do not see any immediate need for another label given the ICMA standards already present and established in the market, particularly with regard to covered bonds in ESG format. However, for the time being we will have to wait for the corresponding draft and associated requirements. At the end of the day, the success of any label depends on its acceptance by the issuers (e.g. with regard to additional expenditure and publication requirements) and investors who have to see added value in another label. Both of these elements remain to be seen for the moment.

Market overview
SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

Focus on Lower Saxony tax revenue estimate
The results of the current tax revenue estimate essentially confirm assumptions to date regarding the economic situation and trend in revenue. When presenting the regionalised results of the May tax revenue estimate, Lower Saxony Finance Minister Reinhold Hilbers explained: “This tax revenue estimate is no silver bullet that will facilitate everything again. Regrettably, the result confirms that we face many years of significantly reduced tax receipts. This cannot be compensated without reducing spending over the long term. In short: all we can look forward to is less than the less we had expected.” The federal state can expect a budget of around EUR 29.1bn this year, and around EUR 30.3bn in the coming year, a total of EUR 31.1bn for 2023, EUR 32.4bn in 2024 and EUR 33.2bn in 2025 in tax receipts. Following financial redistribution at local government level, there is calculated growth of three-digit millions in all years of the period under review compared with the November estimate. However, tax receipts will remain far below the pre-crisis level. In total, it means a revenue reduction of around EUR 4.9bn for the years from 2021 to 2024. As part of the cyclical adjustment procedure, the higher, rule-based tax receipts in 2021 result in lower borrowing than previously planned. Due to the Covid-19 pandemic, the German economy slid into one of the deepest recessions for decades in 2020. Gross domestic product shrank by 4.9% in real terms in 2020. At present, ongoing restrictions in the services sector are offset by a comparatively robust economic situation in industry and strong foreign trade. The support measures implemented by the German federal government and Lower Saxony’s regional government provided an important economic stimulus. Consequently, the downturn was less marked than was feared in the course of last year. For 2021, the tax revenue estimate assumes growth in real economic output of 3.5%. This is based on the assumption that it will be possible to relax the extensive measures implemented in Q2 2021 to limit social contacts. By the end of 2021, economic output should have returned to the pre-crisis level. For 2022, economic growth of 3.6% in real terms is expected. Hilbers elaborated, “Lower Saxony took decisive action during the crisis. We mobilised capital of EUR 7.7bn in the form of a special fund to manage the impacts of the pandemic. The instruments of the debt brake gave us the necessary room to manoeuvre and enabled us to strengthen the structure of the healthcare system as well as the economic structure. This is how we were able to absorb the adverse effects of the pandemic. The debt brake survived its baptism of fire.” The results of the tax revenue estimate will now be incorporated in the current budget allocation process. Hilbers summed up, saying “my aim remains a sustainable financial policy which is geared towards avoiding long-term new borrowing and returning quickly to a sustainable and structurally balanced budget. The results of the tax assessment support us in this endeavour.” The working group on Tax Revenue Estimates met in May this year to determine tax receipts at federal, regional and municipal level.

Lower Saxony and the real property tax

The tax revenue estimates outlined above affect all Laender, the federal government (Bund) and municipalities. No-one will be lying on a bed of roses because of the pandemic. A similarly important topic is Germany's nationwide real property tax reform. According to Lower Saxony's Finance Ministry, Lower Saxony is to have its own, fair and simple real property tax rule by the cut-off date of 1 January 2025 (cf. dedicated article in this issue).

EU as a "risk free" alternative to Bunds?

Investors have recently been asking themselves – and us – whether and how developments in the EU will accelerate and might actually replace Bunds as a "risk free" alternative. In our view, several things are required for this to happen: first, a reasonable volume of bonds outstanding must be available. Prior to the pandemic, the EU had bonds worth approximately EUR 50-60bn outstanding. Following the SURE programme, the EU is now at a level of around EUR 145bn and aims for a further EUR 800bn by the end of 2026 on the back of the NGEU fund. In other words, it is heading for EUR 1,000bn. Germany's outstanding debt will then still be higher and that of France and Italy even higher. Second, the EU will have to reflect the entire (liquid) curve, in order to be considered as a sensible alternative. Americans, in particular, have recently already been talking about the EU as a kind of competitor for US Treasuries. This has also been the case at Bloomberg. Other descriptions have included "safe regional investment" for the European market as an asset in the flight to safety. Third, there are EU budget rules which have "come under strain" because of the crisis. The "frugal four" are likely to continue to object to the communitisation of any further EU debt. Yet, the emerging discussion alone indicates that there is sufficient room for another global player in the market, who is taken seriously from the word go. In this context, we have previously discussed whether bonds could be priced no longer against mid swap and instead versus the EU in the medium term. All of this would of course be conducive to the establishment and institutionalisation or standardisation of an "alternative". However, the sword of Damocles that is the term "debt union" continues to hang over the situation and would require a lot more political work on in Brussels backrooms. Demand for the first NGEU bond issue, with an order book beyond EUR 142bn, indicates that the necessary demand is present in the capital market. In addition, ESG topics are played out transparently and credibly from the start in the form of SURE (100% social) and NGEU (30% green) with a view to transforming the EU on a sustained basis. Furthermore, German Bunds are expensive, whereas France and Italy provide a yield in positive territory. Moreover, sovereign debt – irrespective of a top rating – per se is guaranteed by and/or depends on one country alone, while 27 countries are involved in the case of the EU.

Primary market

In the trading week just ended (Wednesday to Tuesday), only one relevant benchmark transaction was noted in the EUR SSA segment: a social bond issue of UNEDIC amounting to EUR 2bn for 15 years at OAT +10bp (FRTR 1.25% 05/25/36). The order book totalled in excess of EUR 5bn. Compared with the guidance, the bond issue achieved tightening of two basis points. In addition to various tap issues (NIESA for EUR 500m [bid-to-cover 3.6x], KFW for EUR 1bn [5.8x], AFLBNK for EUR 250m [1.4x]), Eurofima, a seldom seen issuer, launched a sub-benchmark green bond deal for seven years at ms +7bp. No further details were disclosed. Furthermore, the EU sent out its RfP for the second NGEU transaction, while Rentenbank has already progressed one step further after issuing a mandate for a 10y green bond yesterday.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
UNEDIC	FR	16.06.	FR00140045Z3	14.9y	2.00bn	ms +17bp	AA / Aa2 / -	X

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research (Rating: Fitch / Moody's / S&P)

Covered Bonds
TLTRO III.8 neither really strong nor extraordinarily weak: implications for the covered bond market

Author: Dr Frederik Kunze

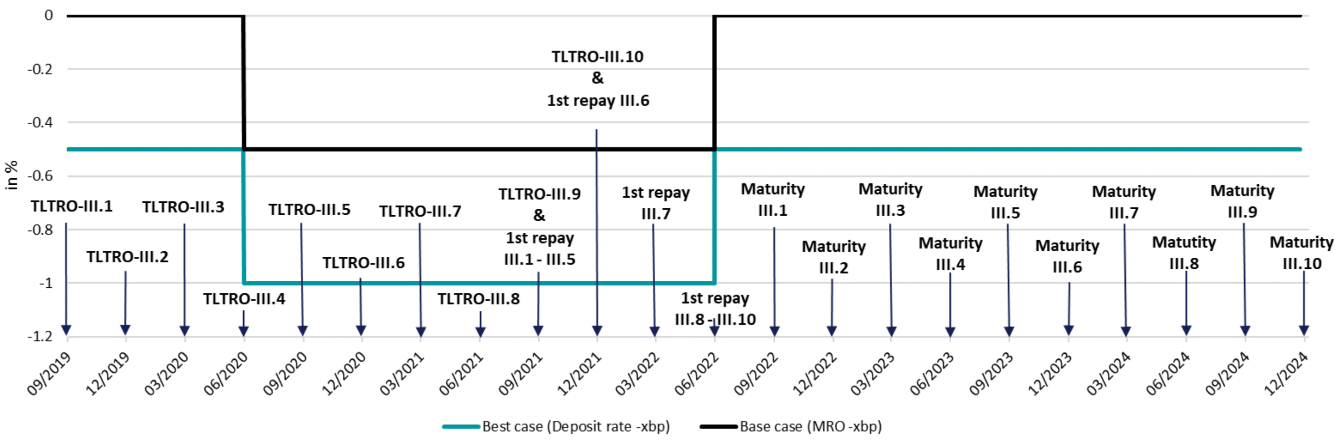
Supply dampener TLTRO III: EUR 109.8bn for the June tender

We have commented repeatedly in this weekly publication on the simultaneous influence of the ECB and Eurosystem on the covered bond market and in this context have outlined both the positive impetus for demand via the CBPP3 as well as the negative influence on the supply of EUR benchmarks. The allotment for the eighth tender in the third round of the TLTRO was announced last trading week (TLTRO III.8). With a volume of EUR 109.83bn and 224 bidders, in our opinion the numbers were neither very strong nor extraordinarily weak. In the following, we will use the allocations announced last week as an opportunity to review the progress of TLTRO III to date, before outlining the possible outlook for the remaining tenders in September and December. Our focus here is the impact on the covered bond segment in particular.

Classification of latest TLTRO-III allotment in quantitative terms

The figure of EUR 109.83bn allotted in the latest TLTRO III tender is noticeably lower than the surprisingly high figure achieved in March this year (TLTRO III.7: EUR 330.5bn; 425 bidders). In contrast, considerably less was taken up by the banks in the TLTRO III.6 tender in December 2020 (EUR 50.41bn; 156 bidders). The operations, which fall clearly in the midst of the coronavirus pandemic and were therefore also able to benefit from gradually improved modalities (see press releases dated 12 March 2020 and 30 April 2020), reported allocations of EUR 174.46bn (TLTRO III.5; 09/2020), the record figure of EUR 1,308.43bn (TLTRO III.4; 06/2020) and EUR 114.98bn (TLTRO III.3; 03/2020). For the first two TLTRO III tenders in September (TLTRO III.1) and December 2019 (TLTRO III.2), allocations stood at just EUR 3.4bn and EUR 97.72bn respectively. In the context of this purely quantitative classification, the latest allocations are clearly in the middle range, although the highest figure of June 2020 and the lowest from September 2019 were in particular influenced by exceptional effects. The first tender in the third TLTRO round had a comparatively short lead time, while the June tender was significantly driven by uncertainty regarding the outlook for the coronavirus crisis. However, when assessing the uptake of the TLTRO III.8 tender, it should be remembered that it is the first of the three additional operations governed by a different interest rate calculation (see also ECB FAQ TLTRO III Q19). For the period 24 June 2021 to 23 June 2022, an interest rate of 50 basis points below the average deposit facility rate (currently -0.50%) can be achieved in a best-case scenario, while from 23 June 2022 onwards the average deposit facility rate would prevail until the end of the respective tender.

Overview of TLTRO III



Source: ECB, NORD/LB Markets Strategy & Floor Research

Still two TLTRO III tenders to go: looking ahead

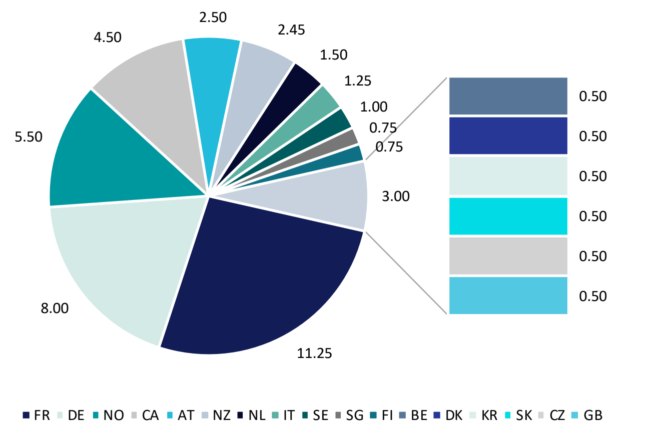
The last two TLTRO III tenders scheduled so far will take place in September 2021 (TLTRO III.9) and December 2021 (TLTRO III.10) (see ECB calendar). Theoretically, both harbour the potential, just like the TLTRO III.8 tender, to curb issuance volume in the EUR benchmark segment. However, in our opinion, there is another facet that merits a closer look. At the same time as the September 2021 tender is taking place, TLTRO III.1 to TLTRO III.5 operations could be repaid early (voluntarily), in whole or in part, and the sums could be transferred into the TLTRO III.9 tender (see also FAQ TLTRO III roll-over Q34). But in this context too, consideration should be given to the impact on modalities. The ECB itself has pointed out that in the event of a roll-over the commercial bank will not receive the best rate (deposit facility rate minus 50 basis points) as of 24 June 2021, even if the criteria for lending can be met in theory. But this is just how the Eurosystem deals with early repayment in principle; in its FAQs, the ECB states that TLTRO III repayments made before June 2022 will not receive the average deposit facility rate minus 50 basis points during the additional exceptional interest rate period (June 2021 to June 2022). For the ninth and tenth tenders however, the best rate achievable (deposit facility rate minus 50 basis points) applies from the settlement date up to 23 June 2022. In view of the current market environment, we believe a strong uptake in the last two tenders is unlikely. However, should allocations here considerably outstrip EUR 100bn, this could already signal the first negative stimuli for issuance behaviour in 2022.

Curbing effect from publicly available covered bond supply

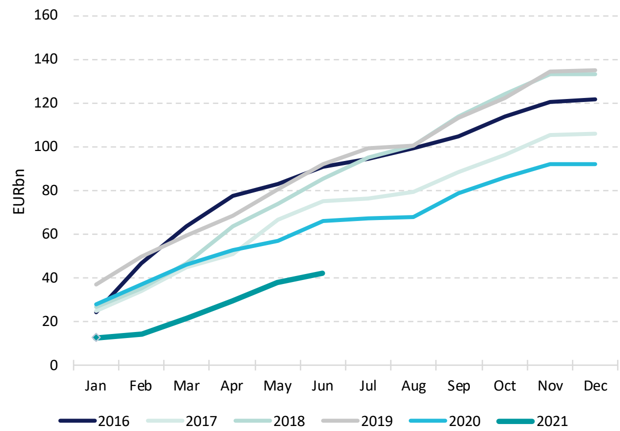
The primary market stands squarely in the shadow of the coronavirus pandemic in 2021. This could and can be seen in the concrete demand for, and advantages of, refinancing via covered bond issues in particular. TLTRO III operations account for a considerable share here, alongside alternative issues of senior unsecured bonds and high levels of customer deposits. This substitutional correlation is also highlighted by the huge rise in retained issues, since retained covered bonds can be used by the issuer itself as collateral in the context of the ECB Collateral Framework.

NORD/LB

Primary market covered bonds 2021 ytd (EUR 42.45bn)



Covered bond issuance pattern

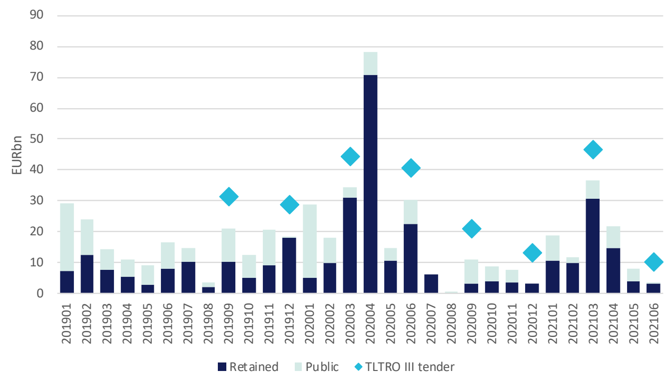


Source: Market data, NORD/LB Markets Strategy & Floor Research

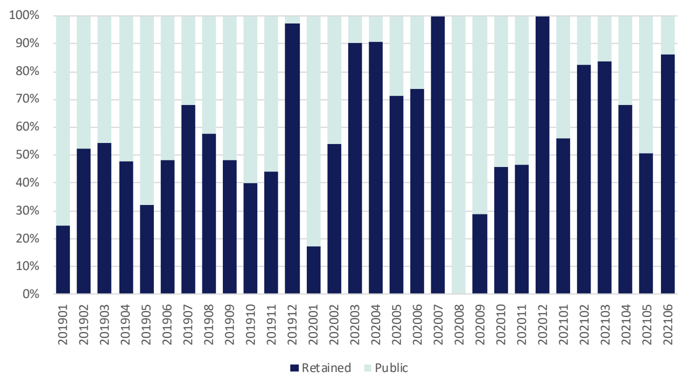
Retained covered bonds and TLTRO III tender

Sharp jumps in retained issues could be seen in the crisis years of 2020/21 during the TLTRO III tenders in particular. At the same time, primary market supply of publicly placed benchmarks was curtailed. However, looking at the latest allocation in the TLTRO III.8 tender, we do not see any additional negative impact on primary market supply. Nor do we expect more than minor disruption potential for the primary market from the remaining tenders, in part because of the modalities in play. Consequently, we see no need to amend our forecast for the covered bond primary market (EUR 78.5bn).

Covered bond issues over time



Share of retained bonds over time

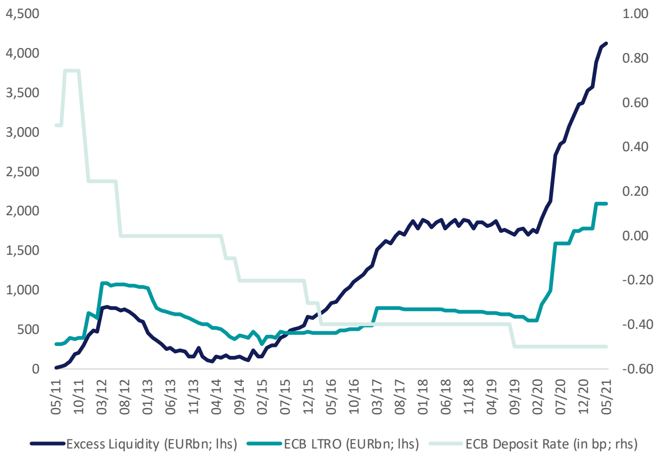


Source: Bloomberg, ECB, NORD/LB Markets Strategy & Floor Research

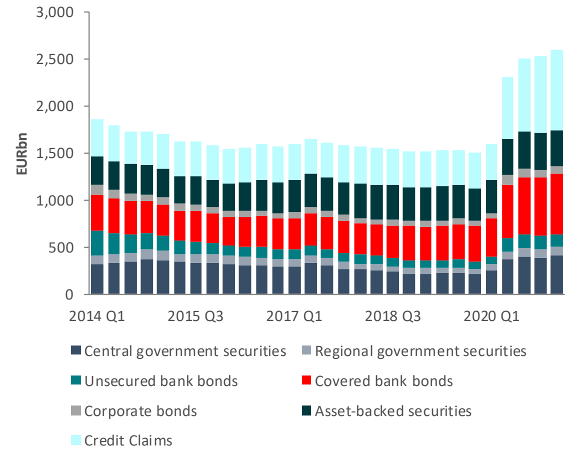
More covered bonds lodged with ECB as collateral

In Q1 2021 the volume of covered bonds lodged with the ECB as collateral stood at EUR 645bn (share of total volume 24.3%). This figure is significantly higher than the volume of EUR 380bn (share 24.6%) reported back in Q4 2019. The parallel trend in the rise in long-term refinancing (LTRO incl. TLTRO) and surplus liquidity is also striking. The purchase programmes in particular are leading to increased liquidity holdings in the banking sector and ultimately also to lower demand for refinancing.

ECB: surplus liquidity, LTRO, deposit facility rate



ECB: use of collateral

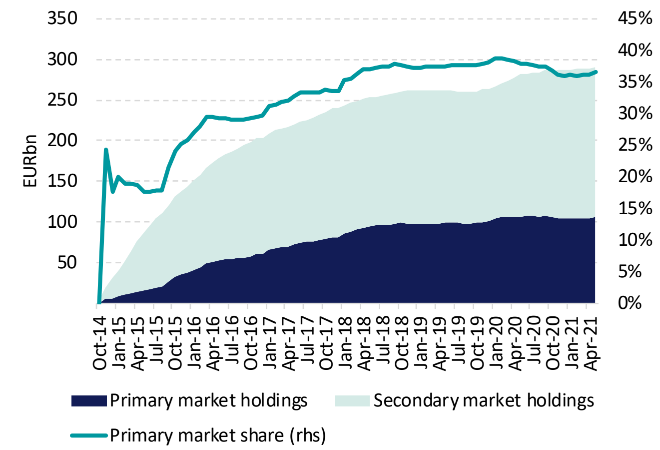


Source: Bloomberg, ECB, NORD/LB Markets Strategy & Floor Research

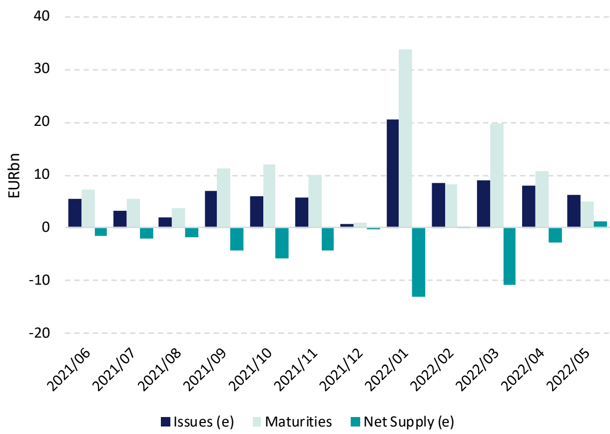
Demand side: CBPP3 continues to have significant impact

The ECB continues to be the main driver on the demand side as well. With monthly purchasing under the CBPP3 of EUR 2bn and refinancing of maturing paper of EUR 30bn, we expect a total demand on the part of the ECB in the primary and secondary market of EUR 54bn in calendar year 2021. The ECB is buying into an already undersupplied market (see chart below: Net Supply: forecast) based on the primary market share of these purchases. Based on the EUR 78.5bn of primary market placements we still expect to see, even after the latest TLTRO III tender, and forecast maturities of EUR 136.4bn, this produces a negative net supply of EUR 57.9bn. The fact that we are not assuming that spreads for covered bonds will tighten further based on this data is due in particular to the current market environment, with growing sensitivity towards rate adjustments in monetary policy as well as inflation concerns. Spreads are currently very low, and after modest widening overall several weeks ago have now reached a new level.

Development of CBPP3



Net supply: forecast



Source: Bloomberg, ECB, NORD/LB Markets Strategy & Floor Research

Conclusion

We view the uptake of EUR 109.83bn in the TLTRO III.8 tender as neither an extraordinarily high uptake nor a weak allocation. With regard to the implications for the covered bond market, we do not see any notable new drivers. We therefore see no need to amend our forecast for the primary market and/or spreads. Looking ahead, the last two TLTRO III-tenders could have a negative impact for supply in 2022 if there is a very strong uptake. However, assuming the current modalities are maintained we believe this is unlikely to be the case. Nevertheless, the uptake in the last two tenders is also relevant when looking further ahead. If there is no TLTRO IV, conclusions will have to be drawn regarding the potential demand for refinancing based on the maturity dates for the tenders and sums actually falling due. This means that in the absence of a TLTRO IV, funding via covered bonds will become more important again. A critical element here could be the record-breaking TLTRO III.4 tender which matures in June 2023. With regard to this 'game changer' in the covered bond market, our focus is on the actual early repayments and recourse to the option of rolling-over in September this year. However, as history has demonstrated, we must also assume there will be new surprises. It is worth recapping here: before TLTRO III was announced, we expected a significantly positive net supply in the covered bond market, citing the need to refinance TLTRO II funds. Years later, we are now dealing with the question of the market implications of a total of ten TLTRO III tenders. The Eurosystem will probably not loosen its grip on the covered bond market that quickly in future either. However, a TLTRO IV should be considered carefully.

SSA/Public Issuers
Realignment of the German real property tax

Author: Dr Norman Rudschuck, CIIA

Differences between the three real property tax models

As we have previously explained in our weekly publication on several occasions, a reform of Germany's nationwide real property tax is necessary; this was indicated by the Federal Constitutional Court. Politicians at Bund and Laender level have made efforts to find a solution in recent years, since real property tax revenue must be secured for local authorities while at the same time complying with the deadline specified by the Federal Constitutional Court for the new regulation. From 1 January 2025, real property tax may only be levied under the new law. For this purpose, the Bund has developed a complex model, which resembles the old legislation. At the same time, it has given the Laender the option of creating their own state legislation on the real property tax. The coalition government in Lower Saxony has now decided to give preference to a solution it developed itself over the federal model. Unlike with the federal model, Lower Saxony's citizens will only have to submit a tax return regarding the real estate tax once. This return comprises a few details regarding the size of real estate and its use. The rest will be handled by the administration. In addition to Lower Saxony, other federal states plan to make use of the opening clause: Bavaria prefers a purely area-based model, Hamburg and Hesse, like Lower Saxony, have opted for an area-based model which is supplemented by a location component.

Federal model

Lower Saxony's Finance Ministry has delivered a differentiation of the three models: the federal act builds on the market value of plots, similar to the current legislation. Since this value must be established for each plot of land, the structure of the act requires a high level of effort by default, is very detailed, not very transparent and complex. To mitigate this situation, comprehensive types and oversimplification are used, which in turn risks again being thrown out by the Federal Constitutional Court as unconstitutional, according to experts. Citizens will find it difficult to retrace the various complex calculation steps. To avoid these obstacles, alternative models have been developed. They are feasible and permitted as, according to the decision of Germany's Federal Constitutional Court, the legislator is not forced to structure the measurement of real property tax on the basis of value.

Area-based model

An option, for example, is – and one selected by Bavaria – a purely area-based model. The burden of real estate tax in this case is not distributed according to the value of the plot of land, but based on the use which the owner of the plot can benefit from as a result of owning their property in the relevant municipality. In Bavaria, this use (the equivalent) will be calculated solely on the basis of the area in future. The area-based model uses the size of the plot and of the building – that is the area – as the measurement. The model is very simple and easy to trace. According to experts, its weakness rests in the fact that the same amount of real estate tax is levied for plots of land of the same size within the same municipality – regardless of whether the property is situated in a prime location or an average location.

Area-location model

Typically the use of a plot depends on the place within a community where it is located, i.e. the location plays a role and can accurately ascertain the relation of one property to another. The municipality will typically offer the owner of land more in a top location and less use in an average location, for example in the form of different distances and the vicinity of local amenities as well as the quality of use/life. These differences are taken into account by the area-location model. As an indicator of location, the indicative land values available nationwide (for building areas) are used for the relevant plot of land. The indicative land value of the plot is compared with the municipal average. This relationship makes the "better" or more "average" of the various locations measurable. Since it does not depend on the amount of the values in absolute terms (not a market value-based model), but instead on the ratio, the factor is dampened (appropriately). As a result, a modest markup or markdown arises. The example used by Lower Saxony's Finance Ministry is as follows: double the indicative land value compared with the average results in a 20% markup. The "location factor" in that case is 1.2. The location factors ensure that the notion of use equivalent has an even greater bearing than in the purely area-based model. They do not reflect the value of the building but instead the participation in municipal services resulting from owning land in the relevant location. In other words, the area-location model optimises the extremely simple area-based model by taking into account the location.

Lower Saxony sees advantages in this model

According to the Finance Ministry, the area-location model is easy to implement and does not contain any determinants that are susceptible to contestation. Compared with the market value-oriented federal model, the area-location model provides the advantage of significantly easier administration with only a one-time main registration of the approx. 3.6 million plots of land to be valued in Lower Saxony instead of regular additional main registrations at 7-year intervals. In the area-location model, new tax assessment notices in the areas concerned would only arise in the event of major changes in the conditions of a location, which could be reviewed by the administration on an automated basis. Overall, this therefore means significant savings in terms of staff costs and administrative expenses. The relevant location factor is to result directly from the regulations of Lower Saxony's real property tax act. Lower Saxony's finance administration is only to carry out the – simple – calculation of these location factors. The result can automatically be included in the calculation of tax. A "real property tax viewer" is to be made available to taxpayers. This is an online map, showing the areas and factors. It is an instrument to ensure transparency and an aid for completing the area details. According to various finance ministries, the aim is to select a good and fair route for measuring real estate tax, which delivers the lowest possible burden on citizens, provides security for local authorities and saves much in terms of staff.

Conclusion

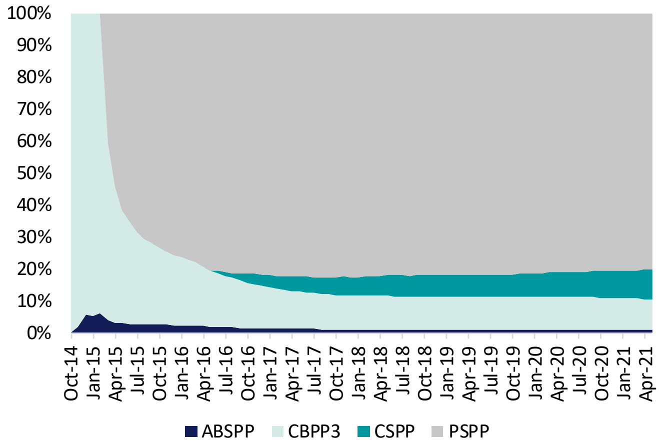
The future real property tax model will neither reform/restructure the budgets of the 16 Laender, nor will it therefore result in changes to ratings and spreads. Ultimately, real estate tax is only due to local authorities, while the Laender are responsible for the planning effort and costs. Although the end result will not be a genuine patchwork pattern, the variants mean that solutions will be very regionalised. The majority of the Laender – North Rhine-Westphalia included – have opted for the federal model. In this sense, given the situation outlined above, the exception again proves the rule.

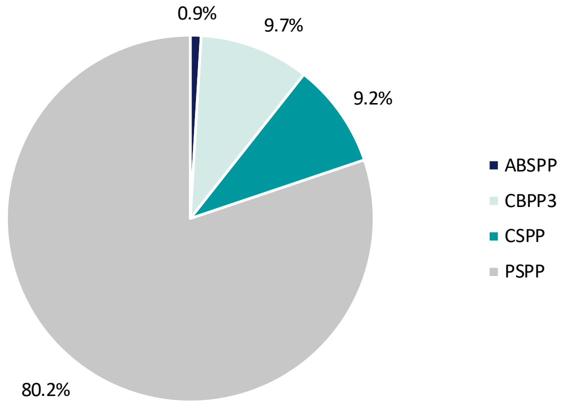
ECB tracker

Asset Purchase Programme (APP)

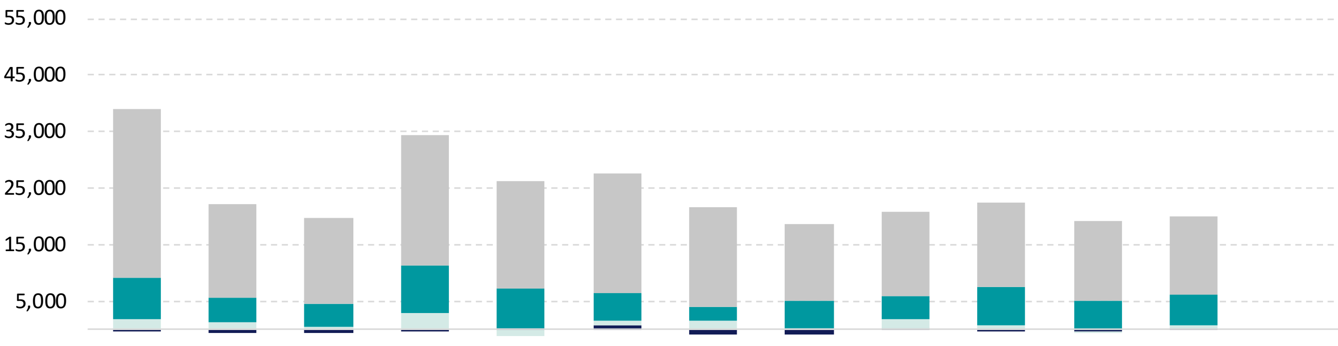
	ABSPP	CBPP3	CSPP	PSPP	APP
Apr-21	28,432	289,418	271,075	2,393,239	2,982,164
May-21	28,520	290,104	276,469	2,407,212	3,002,305
Δ	+88	+686	+5,394	+13,973	+20,141

Portfolio structure





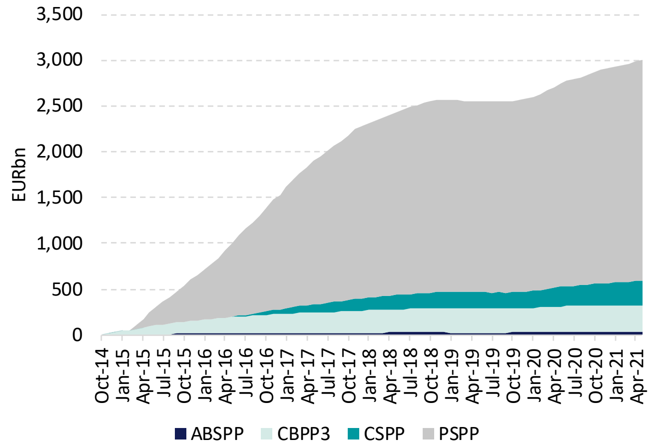
Monthly net purchases (in EURm)



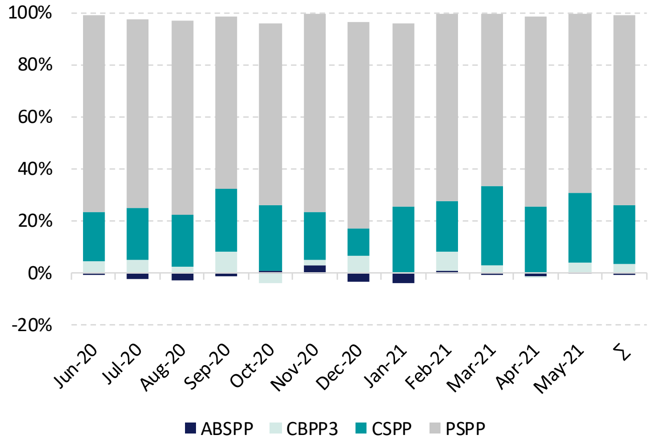
	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	∑
APP	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,846	20,915	22,561	18,918	20,141	287,819
PSPP	29,779	16,370	15,150	23,102	19,182	21,241	17,822	13,655	15,129	14,955	14,186	13,973	214,544
CSPP	7,515	4,502	4,004	8,496	6,983	5,009	2,378	4,924	4,064	6,929	5,015	5,394	65,213
CBPP3	1,731	1,198	500	2,839	-1,041	646	1,529	74	1,539	684	-5	686	10,380
ABSPP	-255	-541	-527	-423	225	824	-800	-807	183	-7	-278	88	-2,318

Source: ECB, NORD/LB Markets Strategy & Floor Research

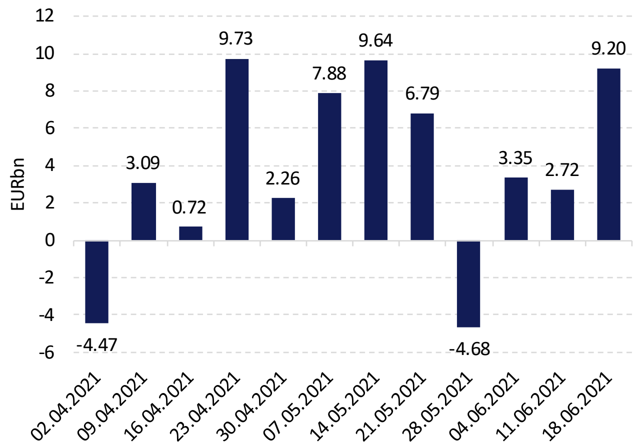
Portfolio development



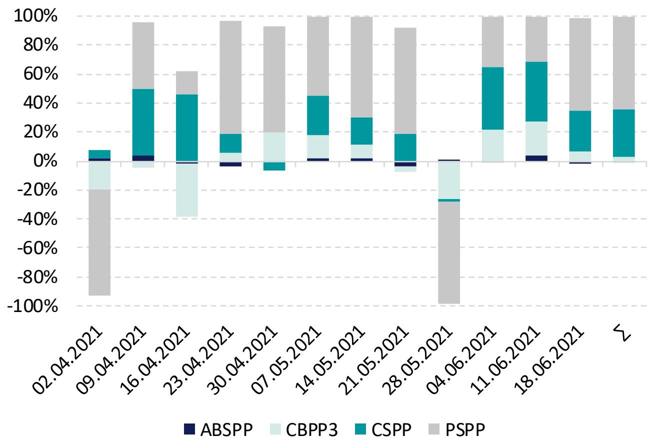
Distribution of monthly purchases



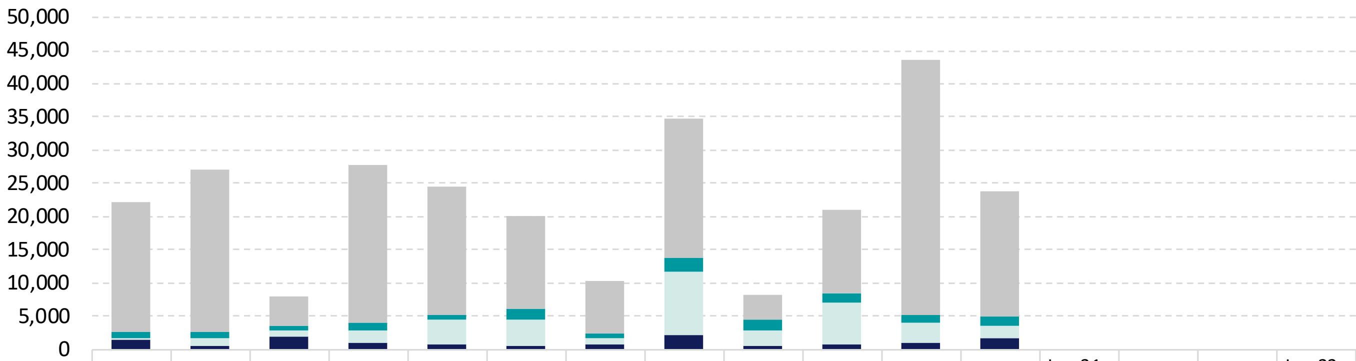
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

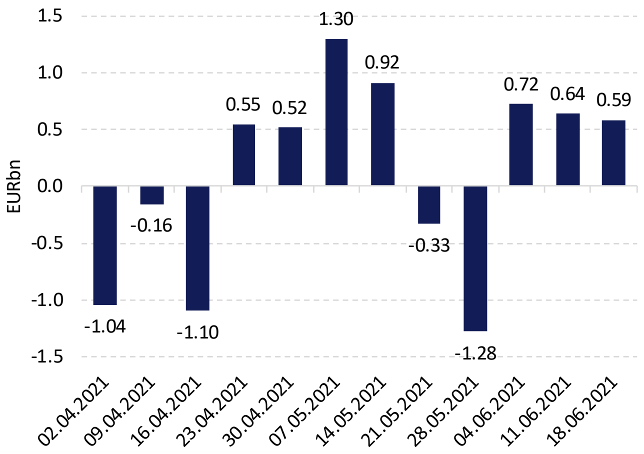


	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-21 - May-22	2020	2021	Jan-22 - May-22
APP	22,244	27,140	7,910	27,662	24,456	20,010	10,231	34,665	8,093	21,113	43,681	23,840	271,045	262,253	245,608	131,392
PSPP	19,519	24,547	4,370	23,655	19,224	13,787	7,811	20,906	3,625	12,603	38,619	18,998	207,664	201,482	188,451	94,751
CSPP	942	828	712	1,102	800	1,673	826	1,946	1,590	1,416	1,125	1,341	14,301	18,267	16,189	7,418
CBPP3	367	1,132	1,002	1,915	3,775	4,048	937	9,776	2,452	6,347	2,990	1,844	36,585	33,236	30,138	23,409
ABSPP	1,416	633	1,826	990	657	502	657	2,037	426	747	947	1,657	12,495	9,268	10,830	5,814

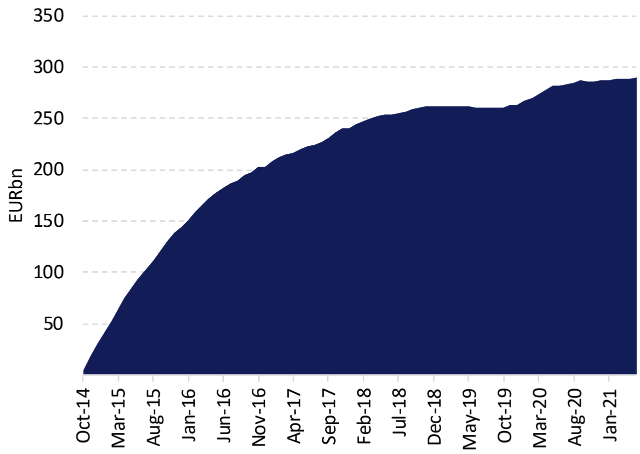
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

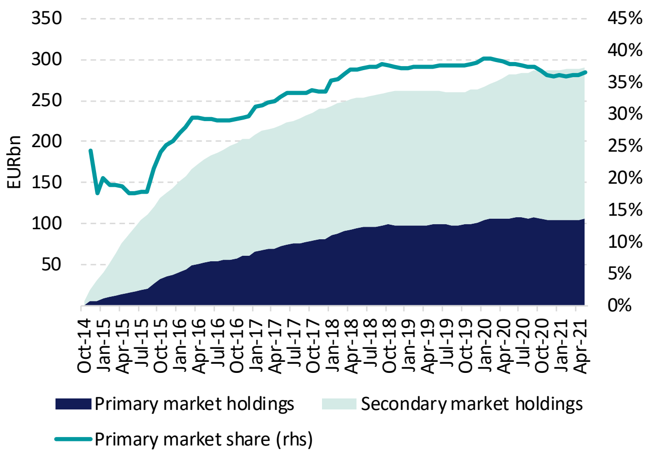
Weekly purchases



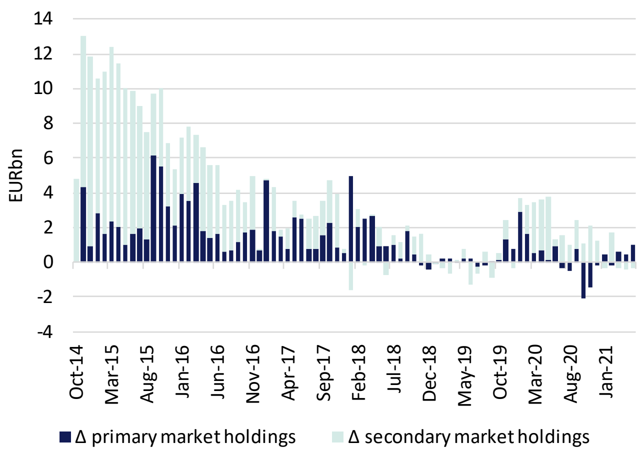
Development of CBPP3 volume



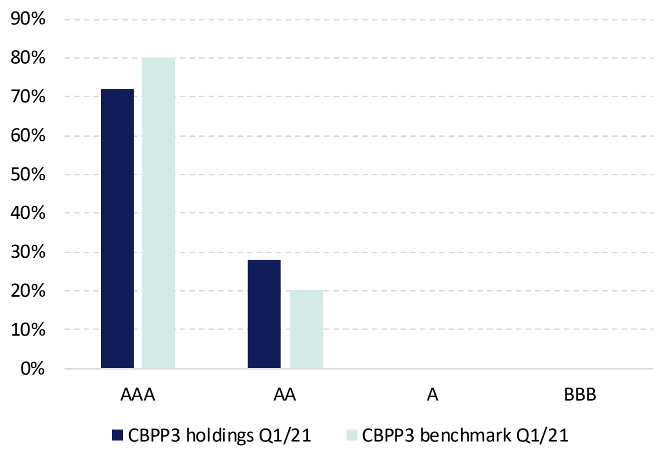
Primary and secondary market holdings



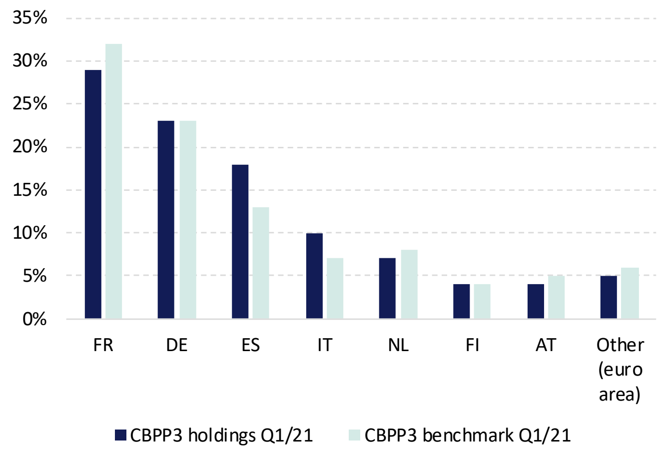
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



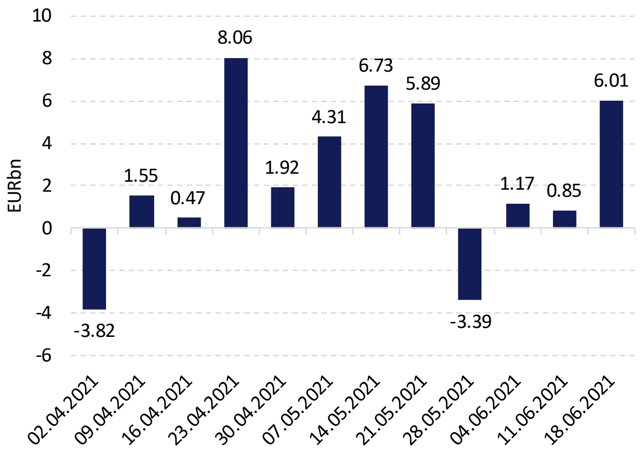
Distribution of CBPP3 by country of risk



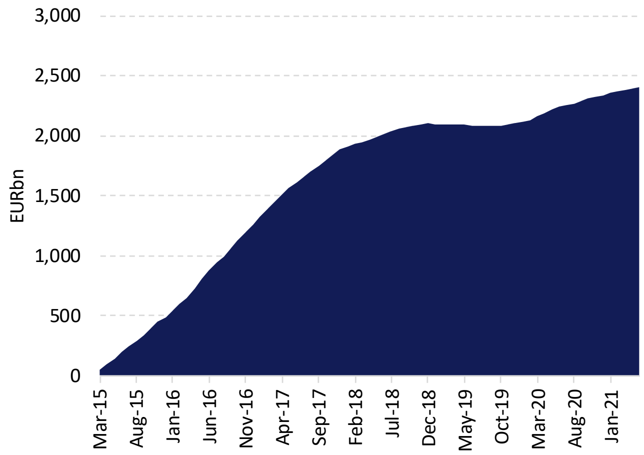
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



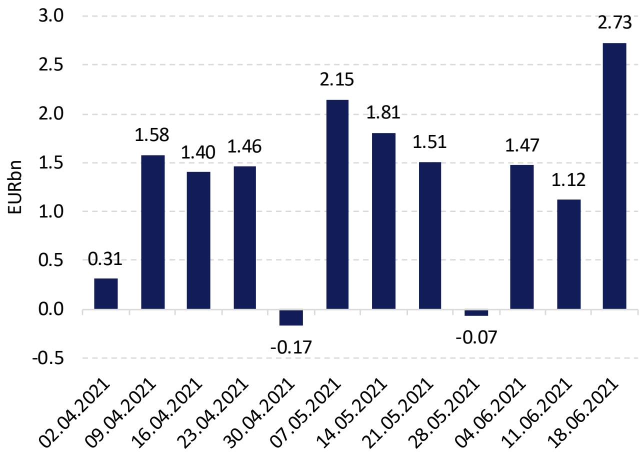
Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key[1]	Purchases (EURm)	Expected purchases (EURm)[2]	Difference (EURm)	Avg. time to maturity[3] (in years)	Market average[3] (in years)[3]	Difference (in years)
AT	2.7%	71,167	68,471	2,696	7.5	7.6	-0.1
BE	3.4%	89,678	85,229	4,449	8.0	10.2	-2.2
CY	0.2%	3,677	5,034	-1,357	9.9	8.8	1.1
DE	24.3%	605,446	616,694	-11,248	6.6	7.6	-1.0
EE	0.3%	387	6,590	-6,203	9.2	7.5	1.7
ES	11.0%	299,019	278,961	20,058	8.0	8.4	-0.4
FI	1.7%	36,889	42,971	-6,082	6.9	7.7	-0.8
FR	18.8%	491,798	477,802	13,996	7.2	8.1	-0.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	39,118	39,615	-497	8.5	10.1	-1.6
IT	15.7%	425,346	397,425	27,921	7.1	7.9	-0.8
LT	0.5%	4,921	13,539	-8,618	10.2	10.6	-0.4
LU	0.3%	3,356	7,706	-4,350	5.6	7.2	-1.7
LV	0.4%	2,882	9,115	-6,233	11.3	10.4	0.9
MT	0.1%	1,259	2,454	-1,195	9.5	9.2	0.3
NL	5.4%	123,437	137,098	-13,661	7.7	9.0	-1.4
PT	2.2%	46,498	54,753	-8,255	7.0	7.2	-0.2
SI	0.4%	9,255	11,264	-2,009	9.9	10.2	-0.3
SK	1.1%	15,716	26,791	-11,075	8.2	8.3	-0.1
SNAT	10.0%	265,166	253,502	11,665	7.7	8.9	-1.2
Total / Avg.	**100.0%**	**2,535,015**	**2,535,015**	**0**	**7.3**	**8.2**	**-0.9**

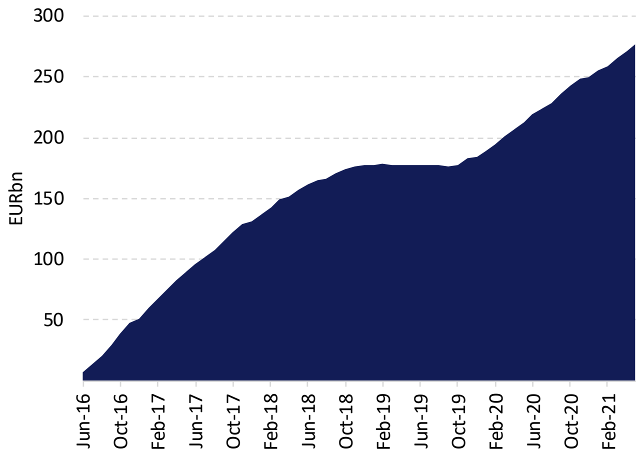
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021)
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

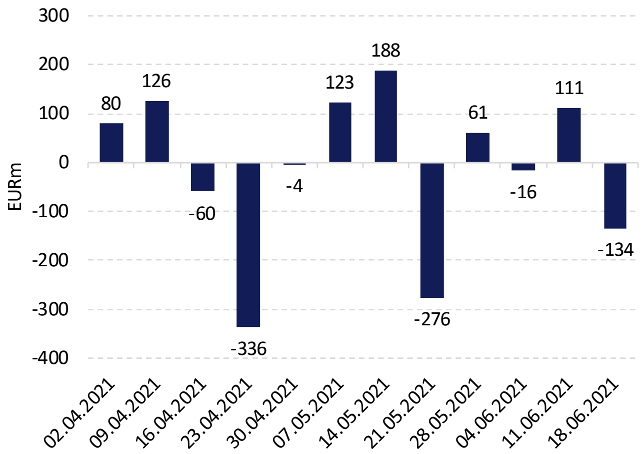


Development of CSPP volume

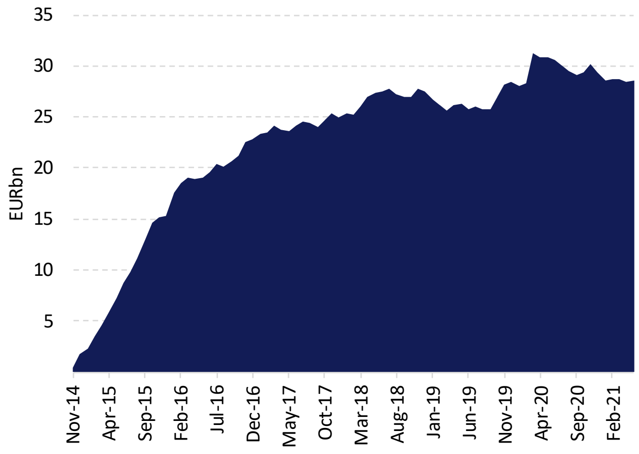


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



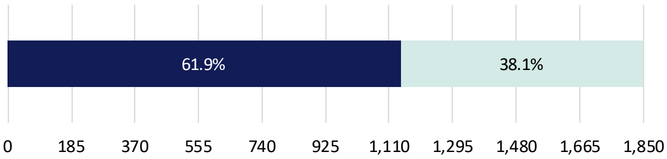
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Apr-21	1,023,766
May-21	1,104,465
Δ	+80,700

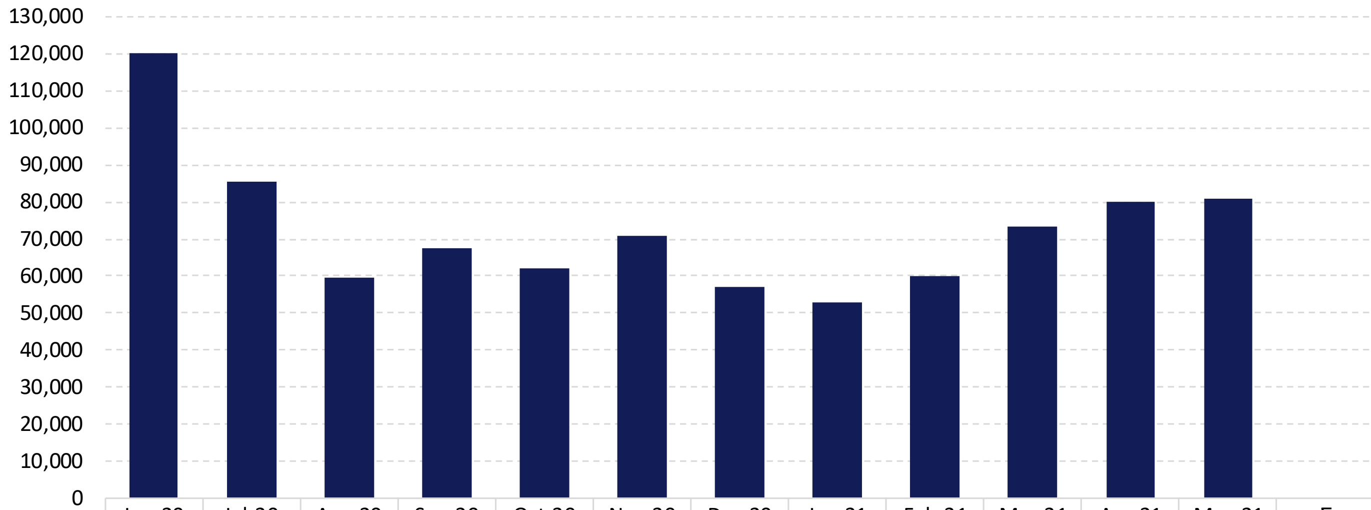
Volume already invested (in EURbn)



Estimated portfolio development

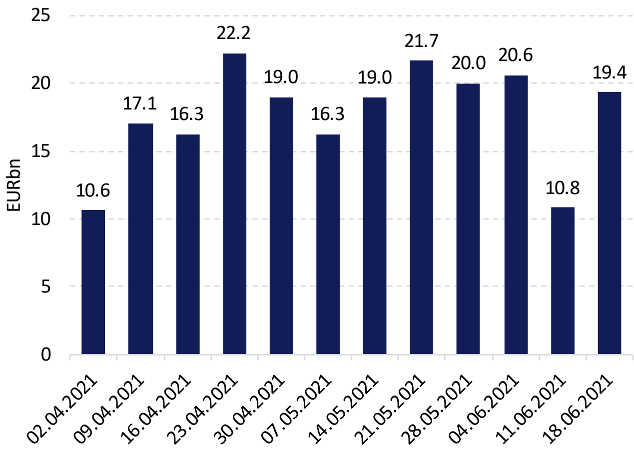
Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in ...
Average weekly net purchase volume so far	EUR 17.9bn	39 weeks (18.03.2022)

Monthly net purchases (in EURm)

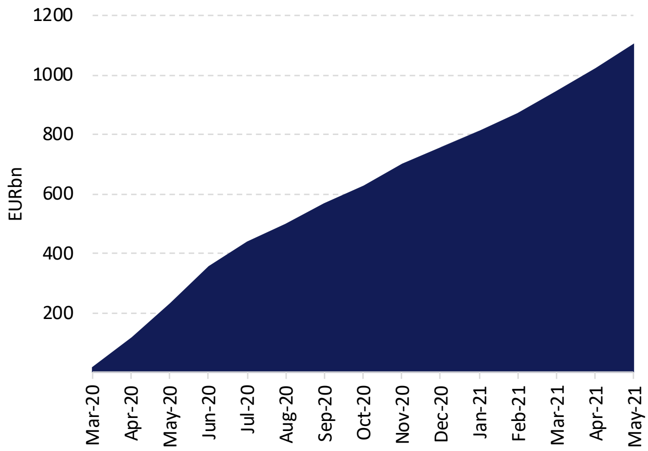


	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	∑
PEPP	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	59,914	73,521	80,118	80,700	869,800

Weekly purchases



Development of PEPP volume

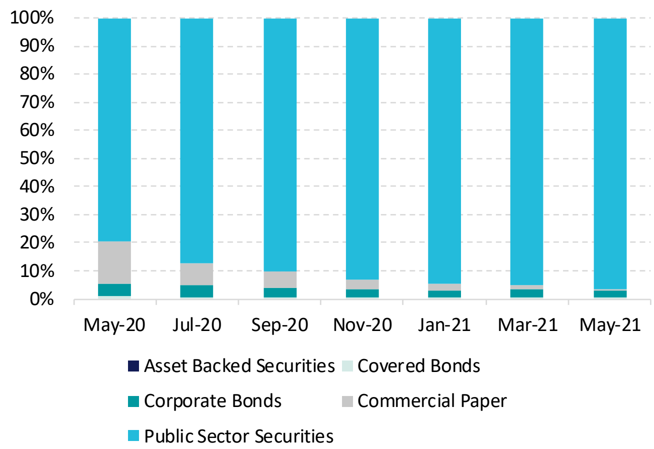


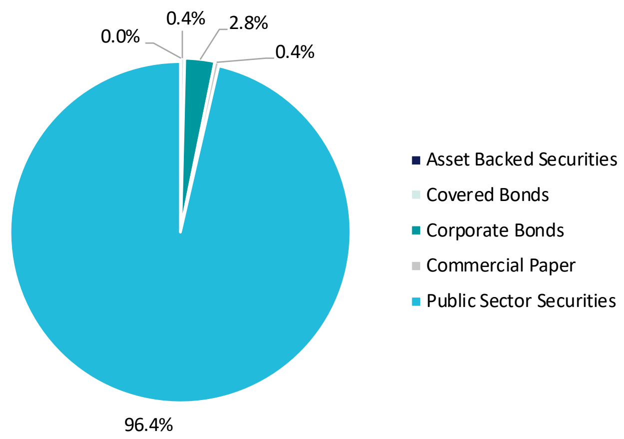
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

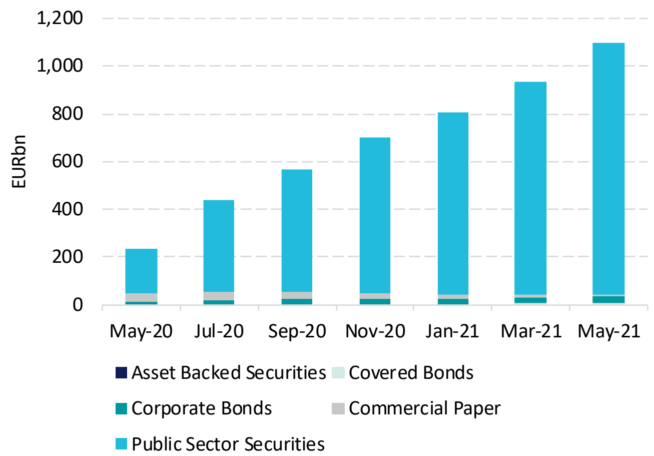
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Mar-21	0	4,055	27,058	12,766	893,844	937,723
May-21	0	4,055	31,014	4,590	1,058,882	1,098,541
Δ	0	0	+3,956	-8,176	+165,038	+160,818

Portfolio structure

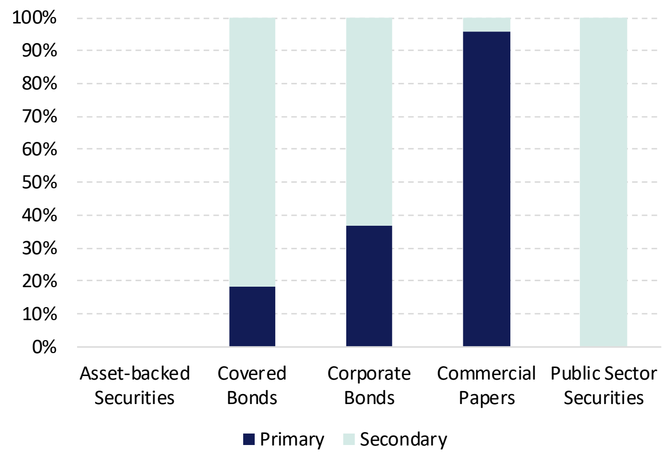




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

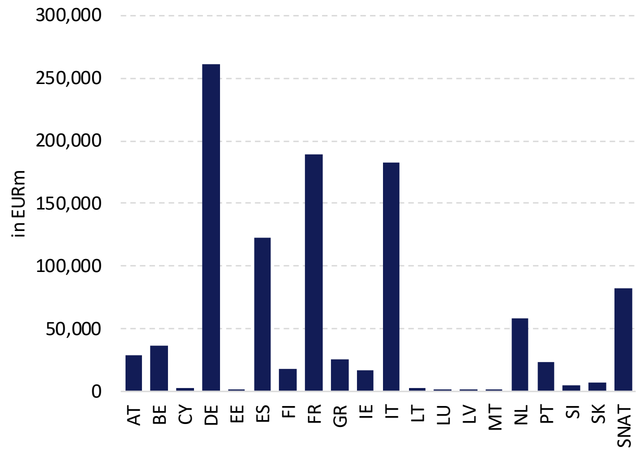
May-21	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**
Holdings in EURm	0	0	745	3,310	11,431	19,583	4,397	193
Share	0.0%	0.0%	18.4%	81.6%	36.9%	63.1%	95.8%	4.2%

Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

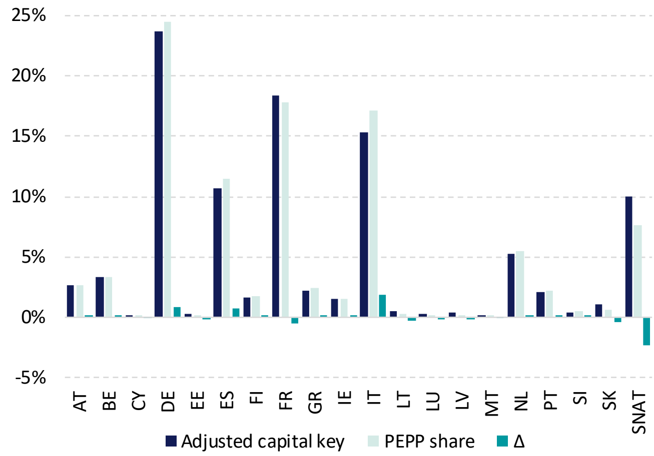
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	ø time to maturity (in years)	Market average[3] (in years)	Difference (in years)
AT	28,731	2.6%	2.7%	0.1%	9.4	6.9	2.6
BE	36,086	3.3%	3.4%	0.1%	6.7	9.1	-2.5
CY	2,060	0.2%	0.2%	0.0%	9.7	8.3	1.4
DE	261,137	23.7%	24.5%	0.8%	6.1	6.8	-0.7
EE	255	0.3%	0.0%	-0.2%	9.0	7.3	1.7
ES	122,583	10.7%	11.5%	0.8%	8.3	7.6	0.7
FI	18,174	1.7%	1.7%	0.1%	7.3	7.5	-0.2
FR	189,672	18.4%	17.8%	-0.6%	8.5	7.7	0.8
GR	25,680	2.2%	2.4%	0.2%	9.5	9.9	-0.5
IE	16,770	1.5%	1.6%	0.1%	9.2	9.5	-0.3
IT	182,946	15.3%	17.2%	1.9%	6.9	7.0	-0.1
LT	2,505	0.5%	0.2%	-0.3%	11.1	9.9	1.2
LU	1,726	0.3%	0.2%	-0.1%	7.0	6.6	0.5
LV	1,344	0.4%	0.1%	-0.2%	9.8	9.7	0.1
MT	305	0.1%	0.0%	-0.1%	7.9	8.7	-0.8
NL	58,043	5.3%	5.5%	0.2%	6.0	8.4	-2.3
PT	23,730	2.1%	2.2%	0.1%	7.4	7.3	0.1
SI	4,838	0.4%	0.5%	0.0%	9.2	9.3	-0.2
SK	6,384	1.0%	0.6%	-0.4%	9.5	8.4	1.1
SNAT	81,801	10.0%	7.7%	-2.3%	10.4	8.4	2.1
Total / Avg.	**1,064,769**	**100.0%**	**100.0%**	**0.0%**	**7.6**	**7.5**	**0.1**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



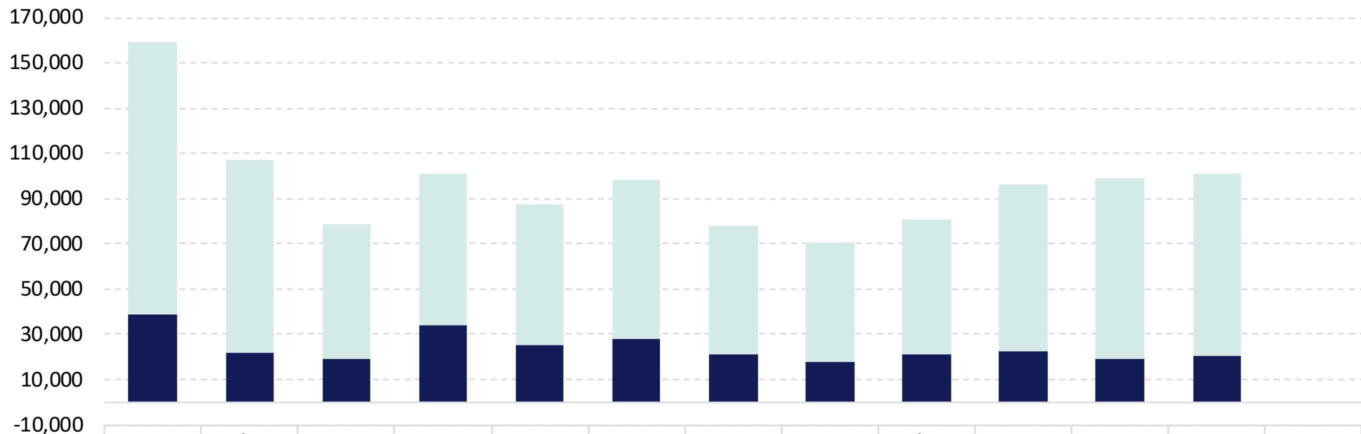
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

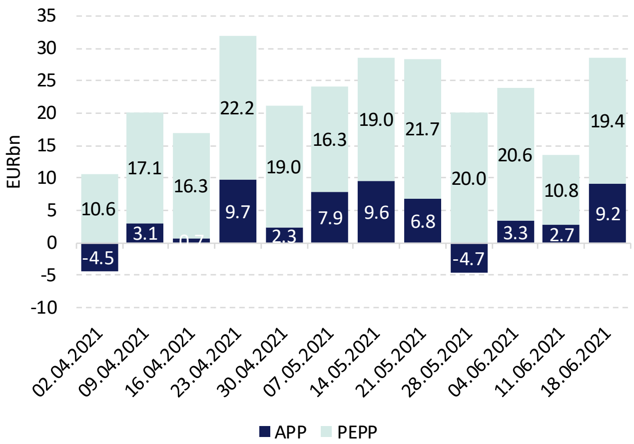
	APP	PEPP	APP & PEPP
Apr-21	2,982,164	1,023,766	4,005,930
May-21	3,002,305	1,104,465	4,106,770
Δ	+20,141	+80,700	+100,841

Monthly net purchases (in EURm)

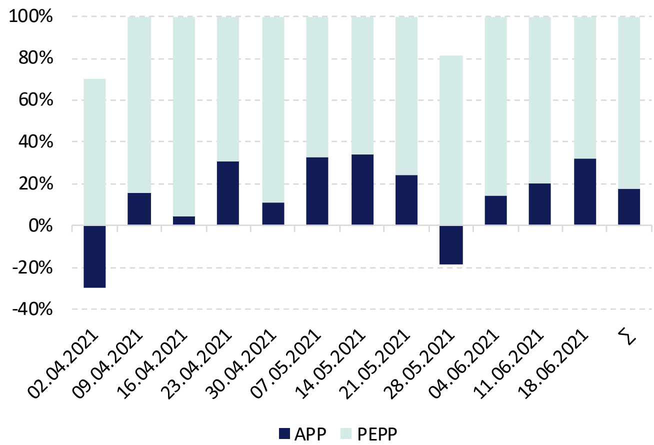


	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	∑
∑	159,091	106,952	78,593	101,322	87,334	98,555	78,092	70,892	80,829	96,082	99,036	100,841	1,157,61
PEPP	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	59,914	73,521	80,118	80,700	869,800
APP	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,846	20,915	22,561	18,918	20,141	287,819

Weekly purchases



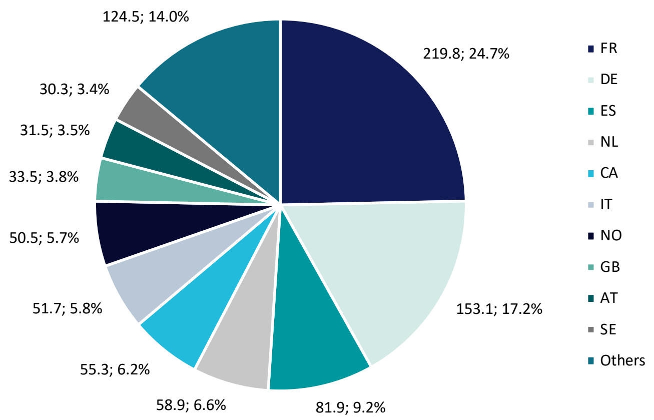
Distribution of weekly purchases



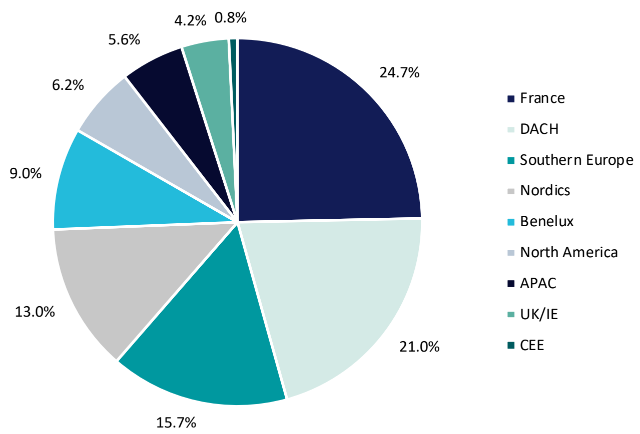
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



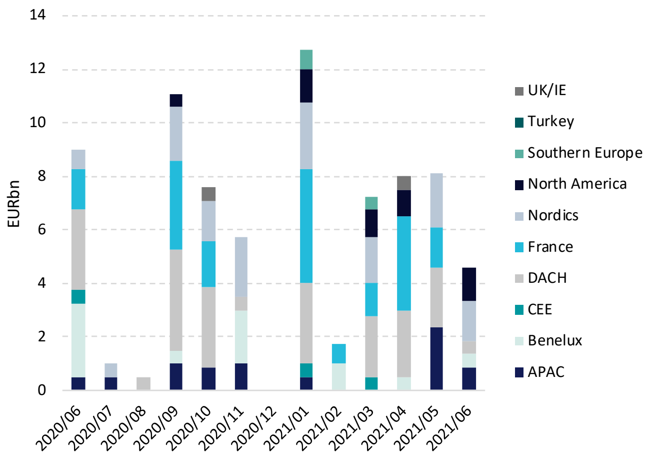
EUR benchmark volume by region (in EURbn)



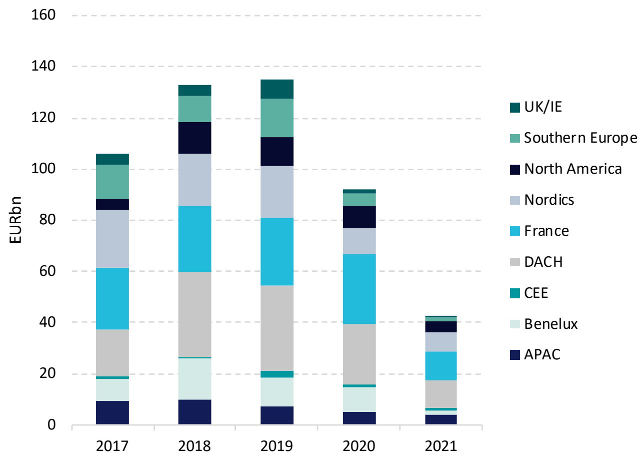
Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	219.8	205	205	0.95	10.1	5.5	1.06
2	DE	153.1	229	229	0.60	8.4	4.7	0.43
3	ES	81.9	67	67	1.13	11.4	3.9	1.79
4	NL	58.9	60	60	0.93	11.3	7.4	0.90
5	CA	55.3	48	48	1.12	6.1	3.2	0.26
6	IT	51.7	60	60	0.83	9.1	4.2	1.41
7	NO	50.5	57	57	0.89	7.3	4.0	0.45
8	GB	33.5	39	39	0.89	8.6	3.5	1.02
9	AT	31.5	58	58	0.54	10.0	6.5	0.63
10	SE	30.3	36	36	0.84	7.5	3.6	0.44

EUR benchmark issue volume by month

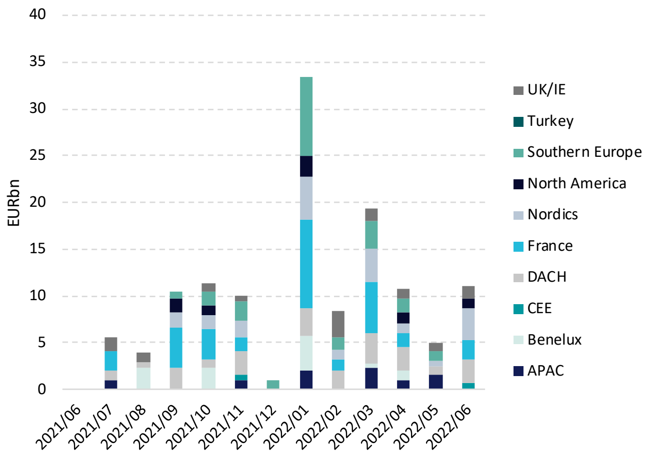


EUR benchmark issue volume by year

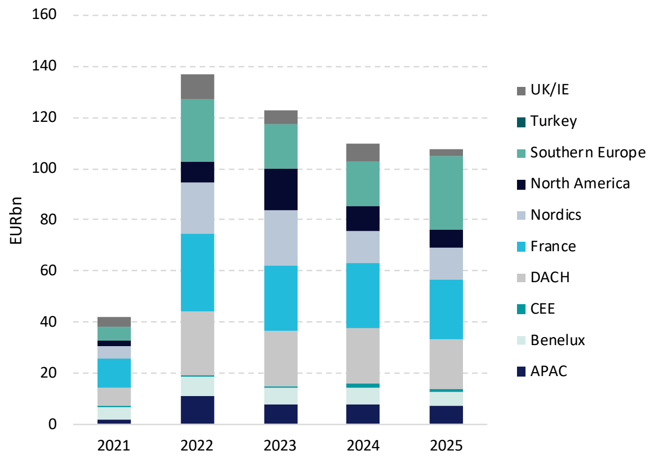


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

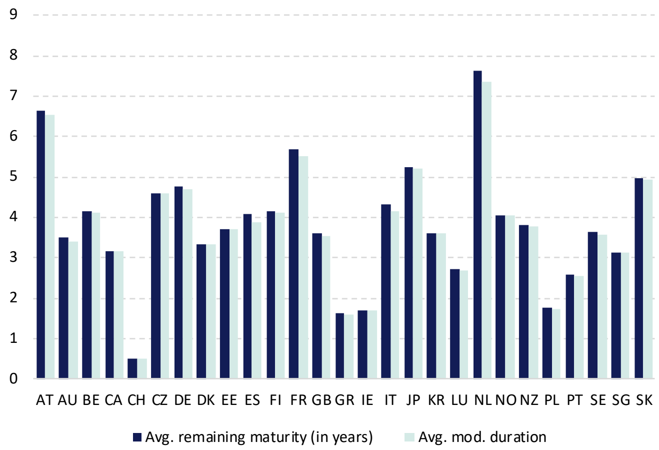
EUR benchmark maturities by month



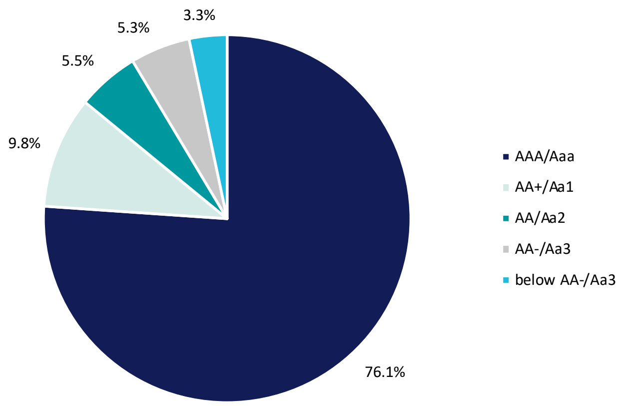
EUR benchmark maturities by year



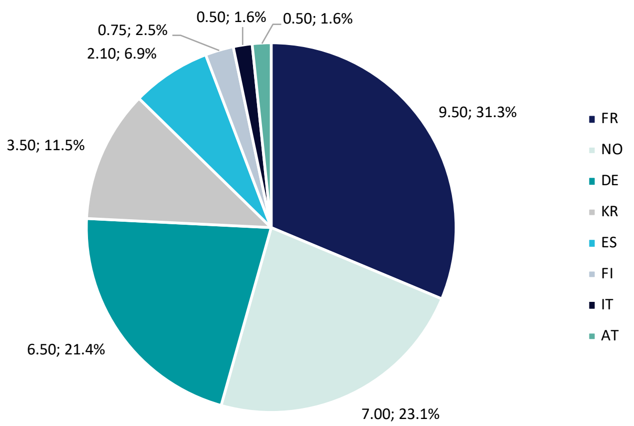
Modified duration and time to maturity by country



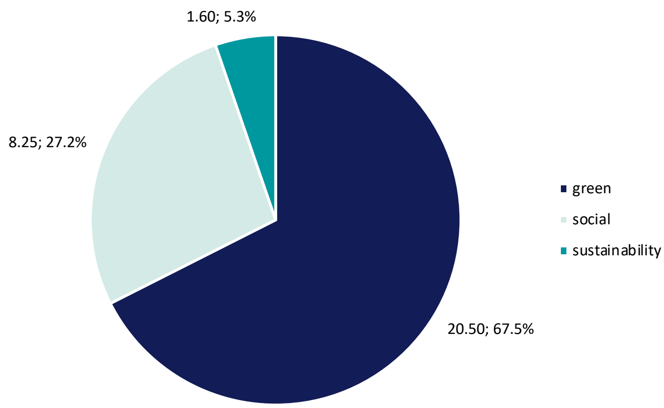
Rating distribution (volume weighted)



EUR benchmark volume (ESG) by country (in EURbn)

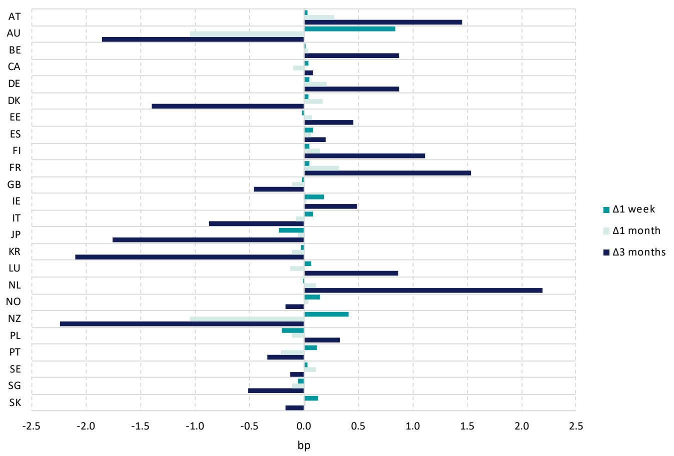


EUR benchmark volume (ESG) by type (in EURbn)

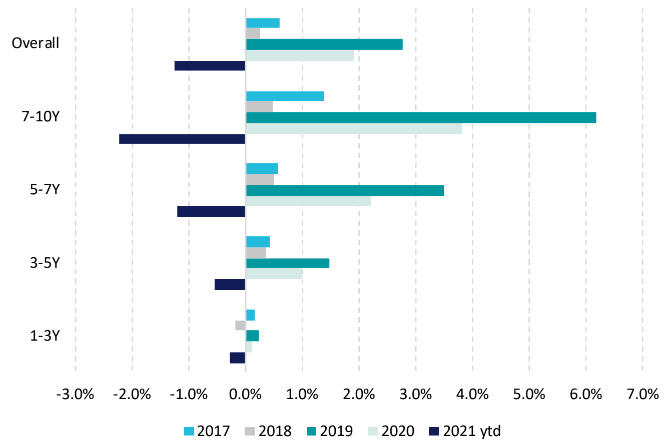


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

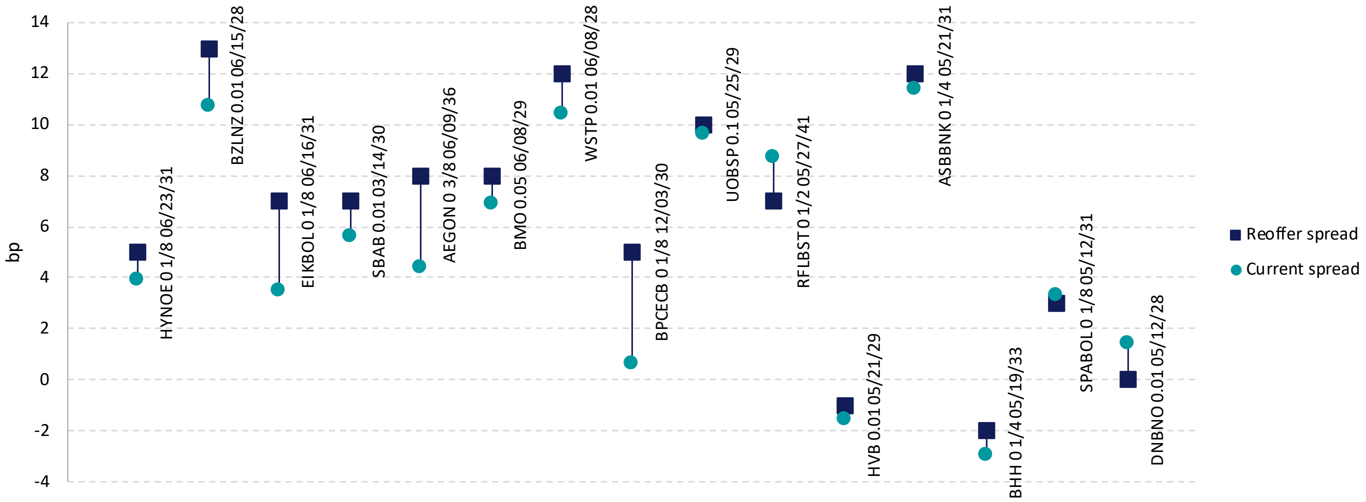
Spread development by country



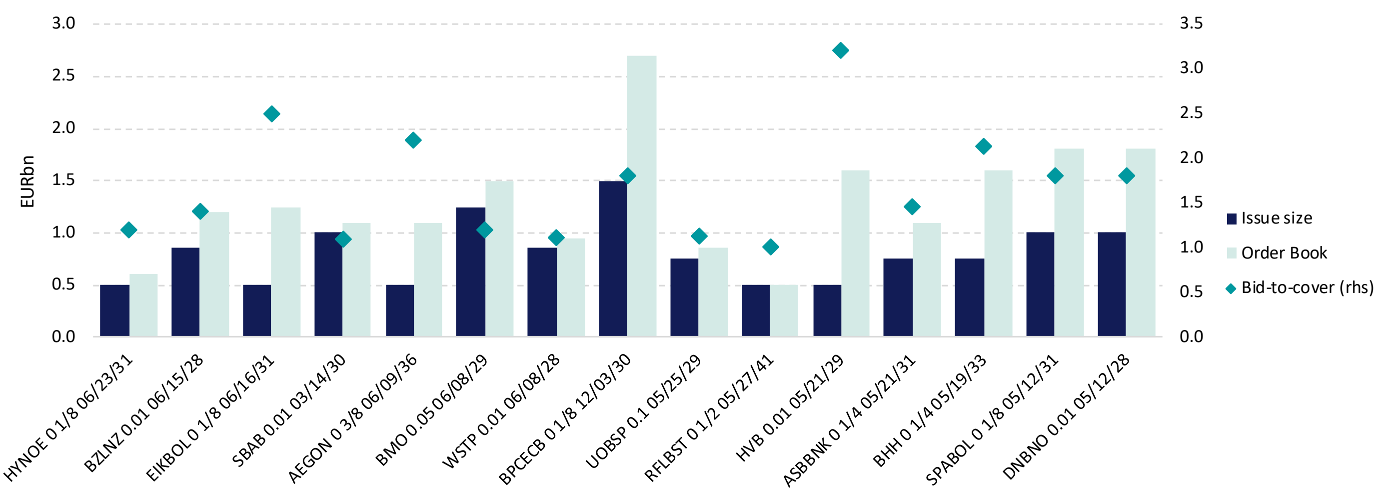
Covered bond performance (Total return)



Spread development (last 15 issues)



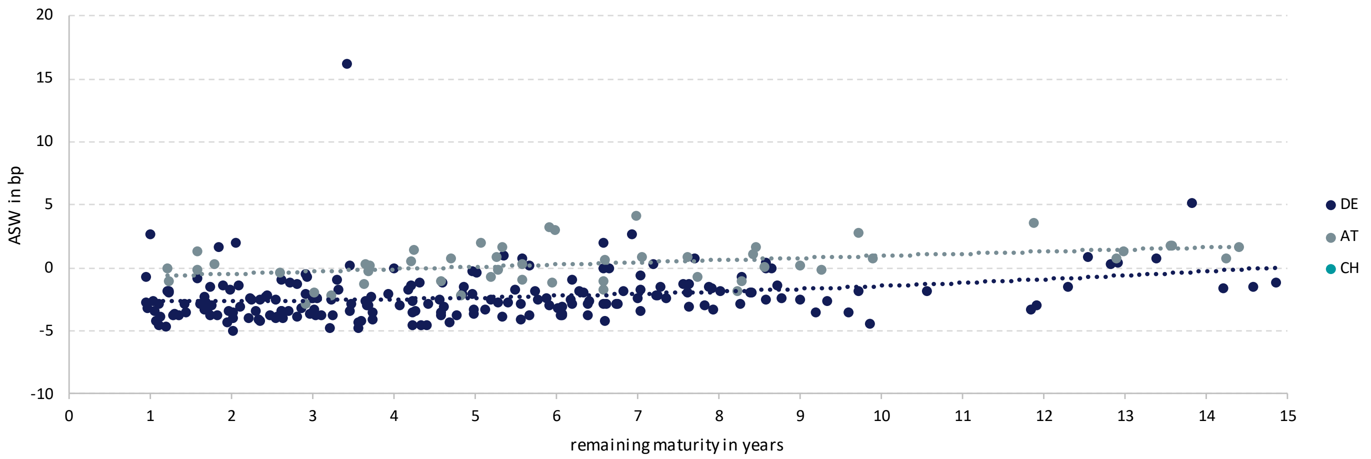
Order books (last 15 issues)



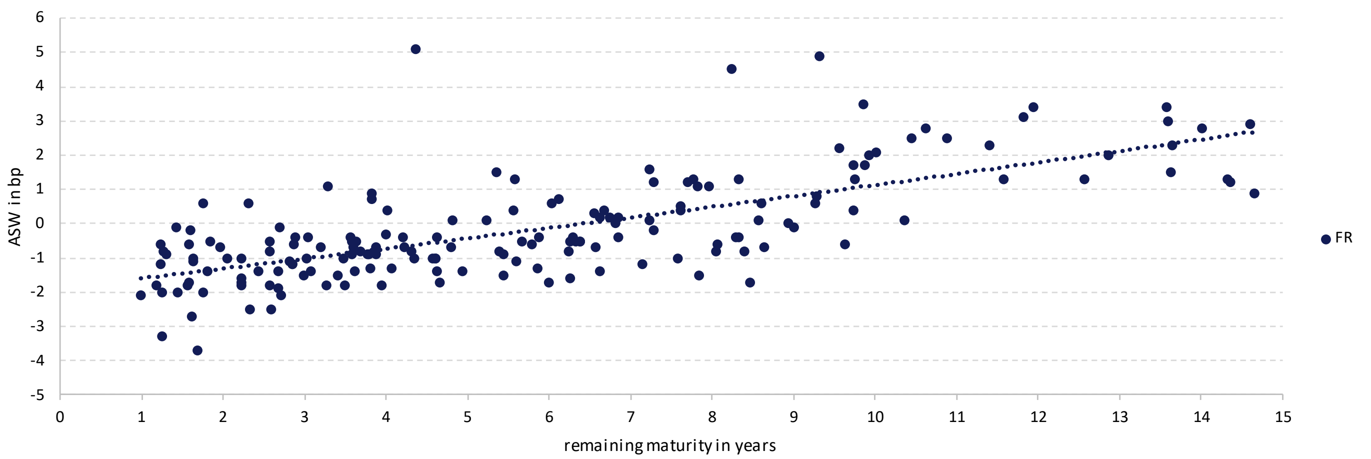
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

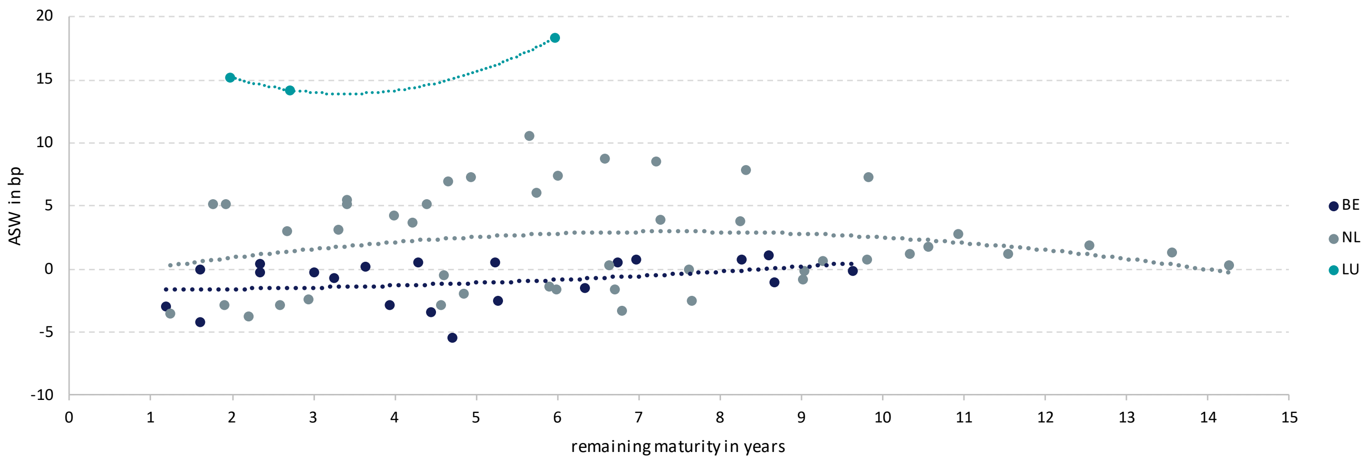
DACH



France

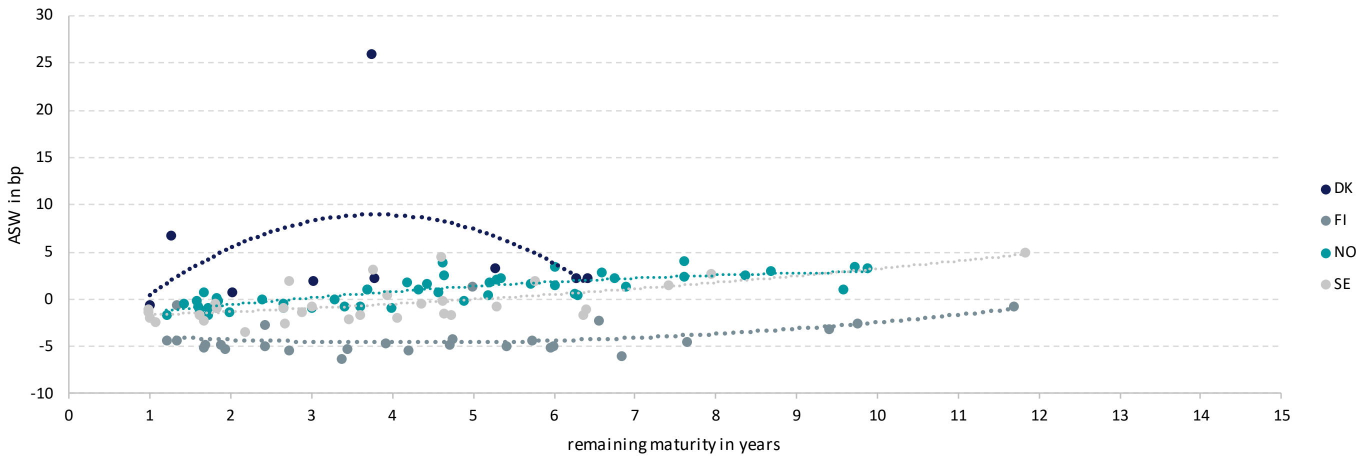


Benelux

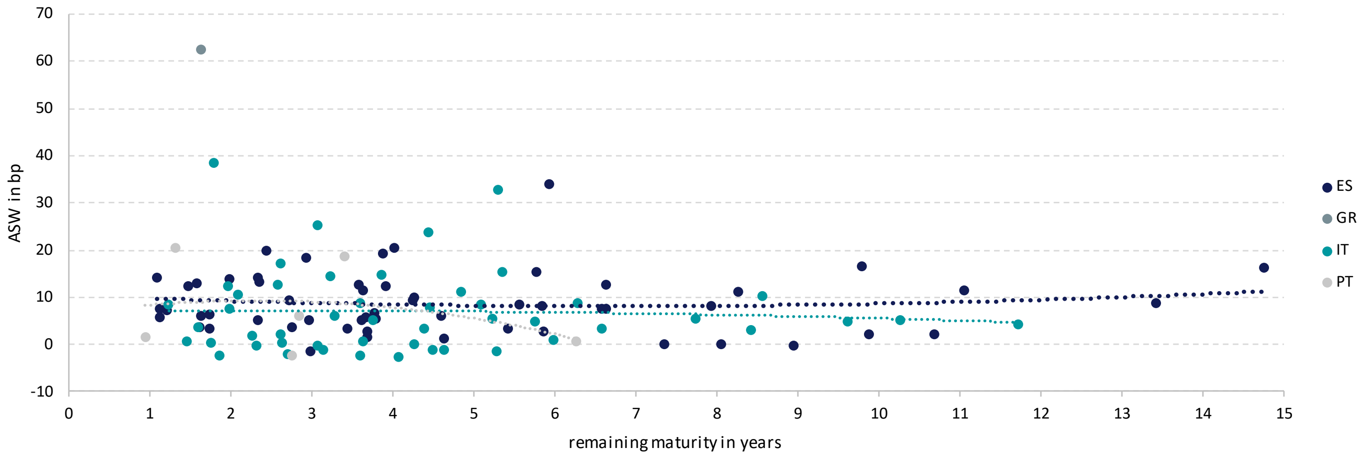


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

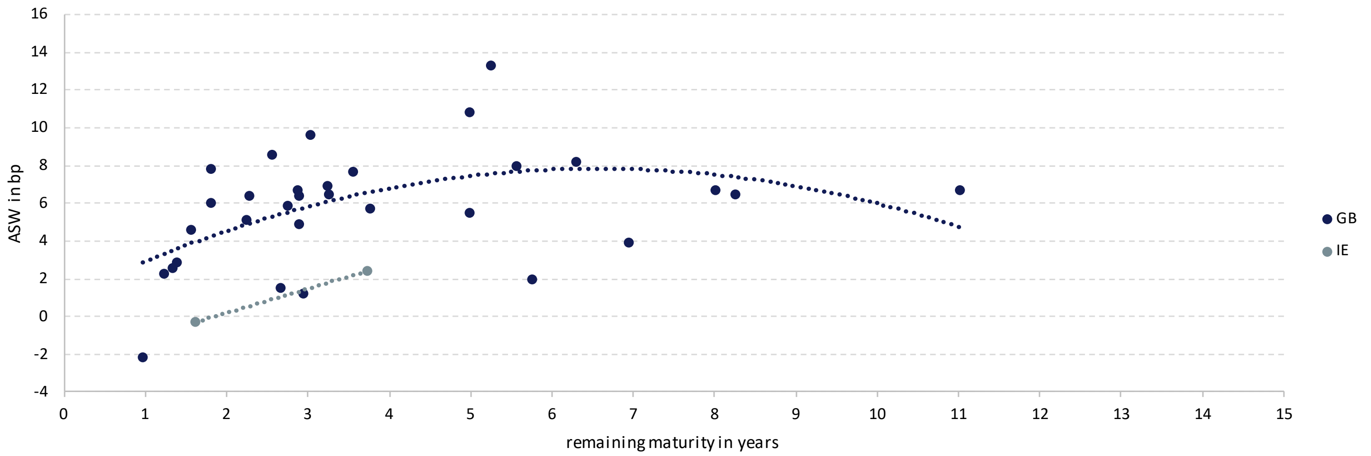
Nordics



Southern Europe



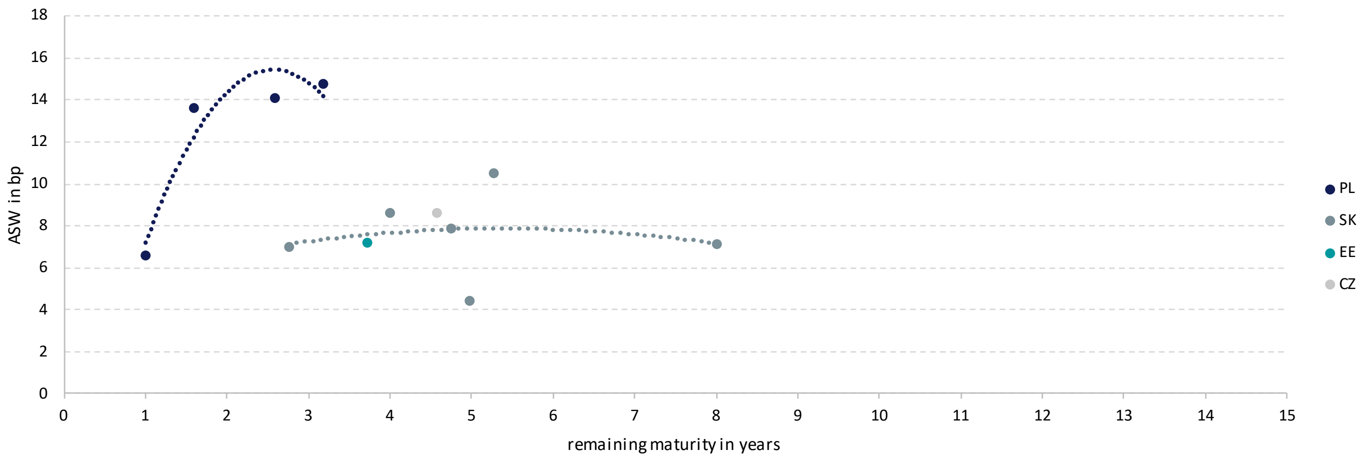
UK/IE



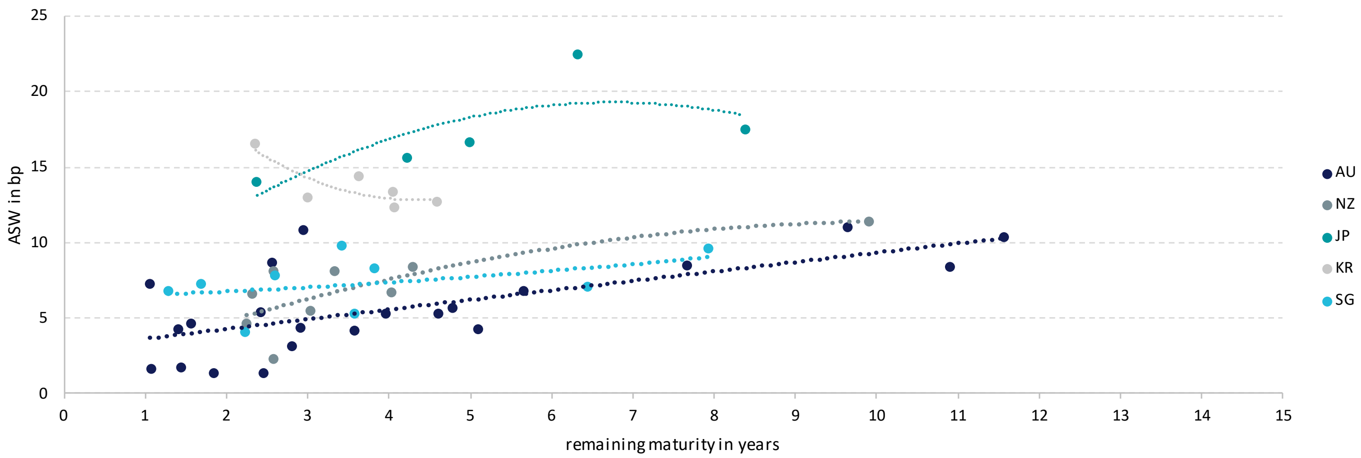
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

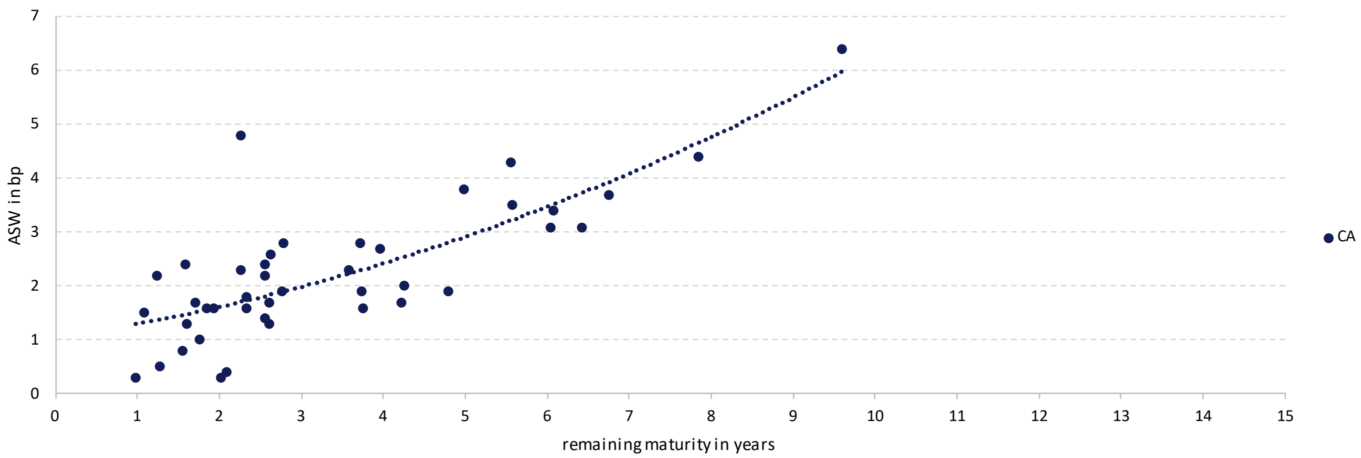
CEE



APAC



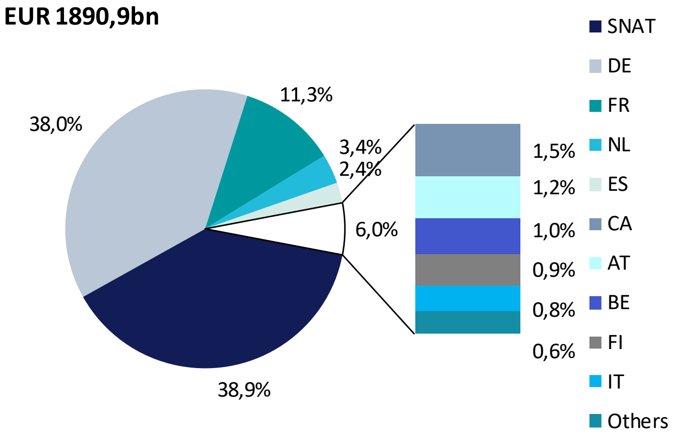
North America



Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
SSA/Public Issuers

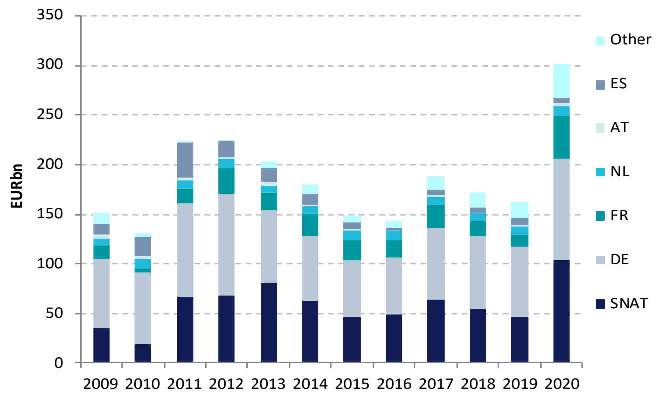
Outstanding volume (bmk)



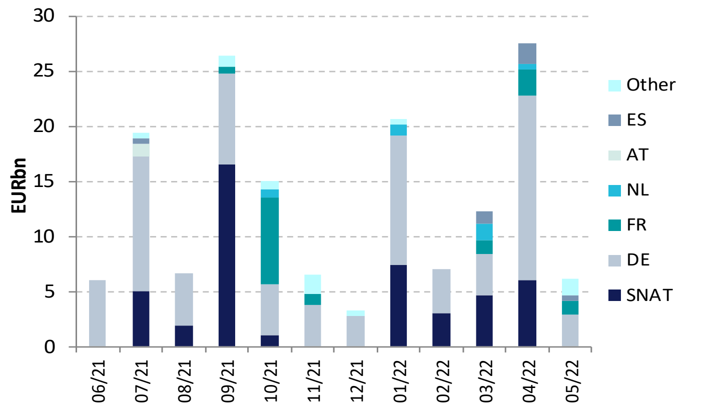
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	735,5	189	3,9	8,3
DE	718,6	558	1,3	6,8
FR	214,5	145	1,5	5,6
NL	64,4	65	1,0	6,6
ES	44,7	55	0,8	5,4
CA	28,5	20	1,4	5,8
AT	22,3	24	0,9	5,2
BE	19,2	23	0,8	14,8
FI	17,0	22	0,8	5,8
IT	14,5	18	0,8	6,0

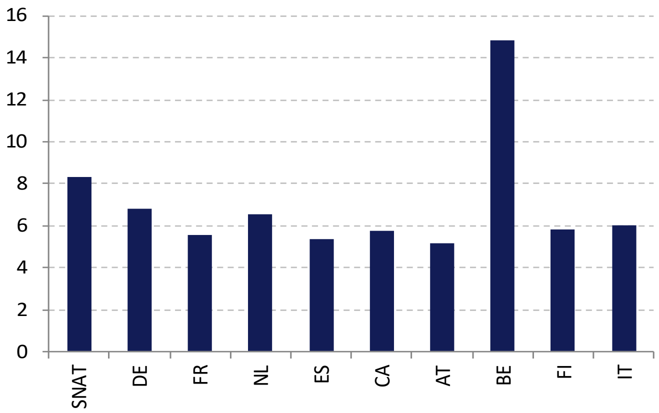
Issue volume by year (bmk)



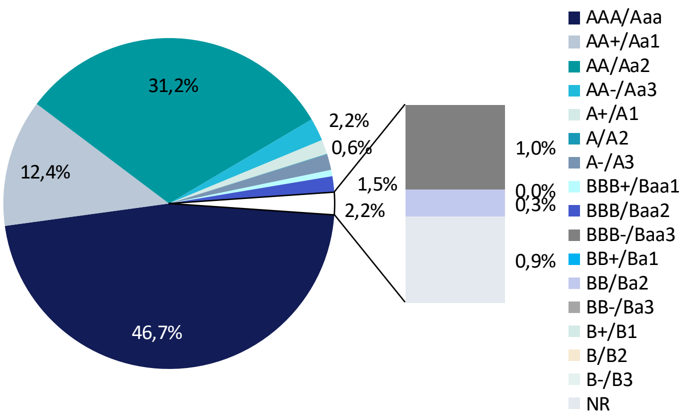
Maturities next 12 months (bmk)



Avg. mod. duration by country (vol. weighted)

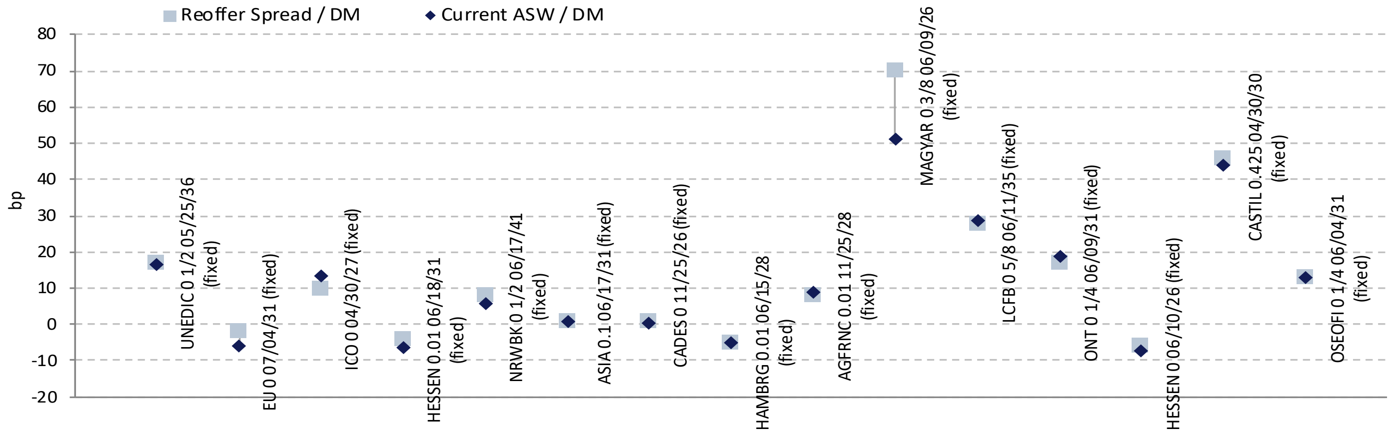


Rating distribution (vol. weighted)

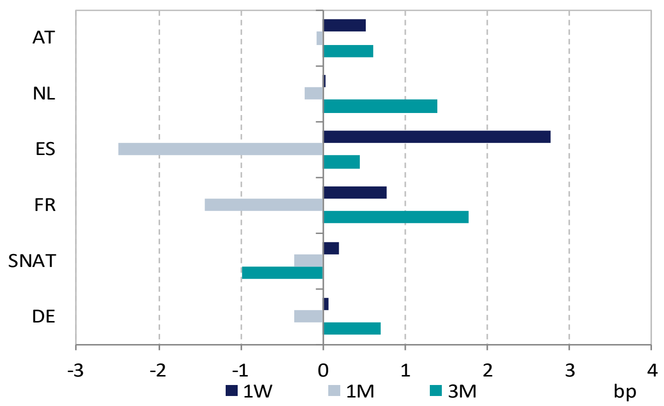


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

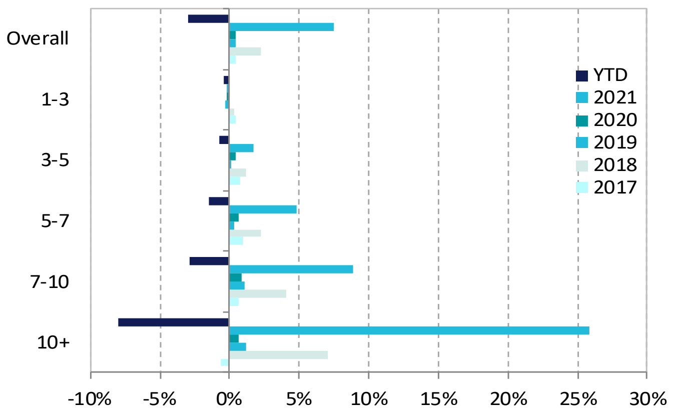
Spread development (last 15 issues)



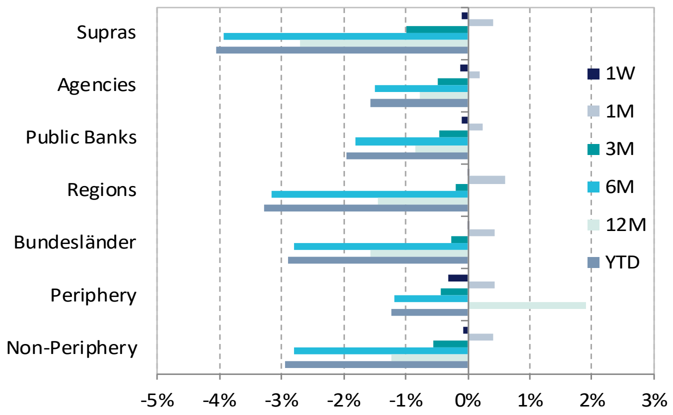
Spread development by country



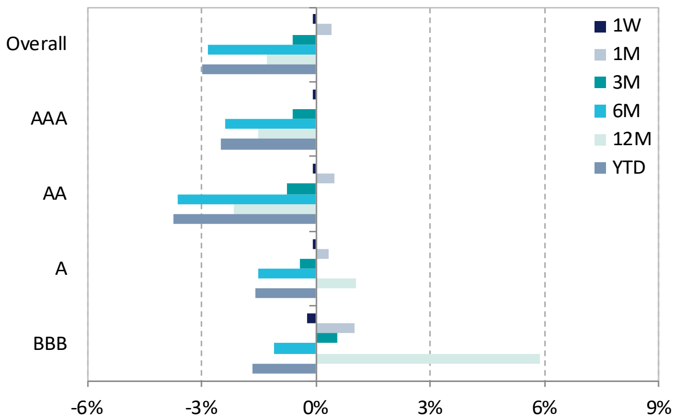
Performance (total return)



Performance (total return) by regions

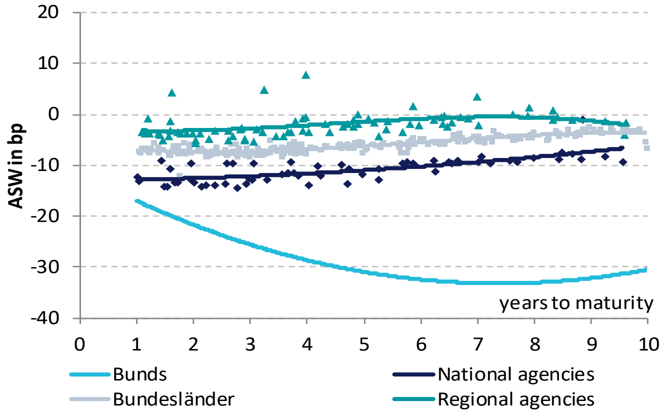


Performance (total return) by rating

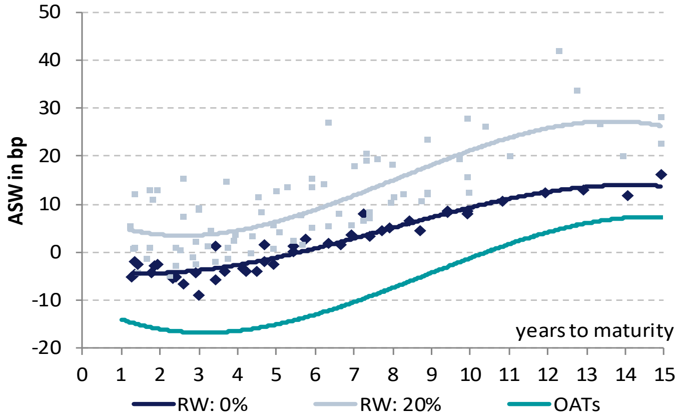


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

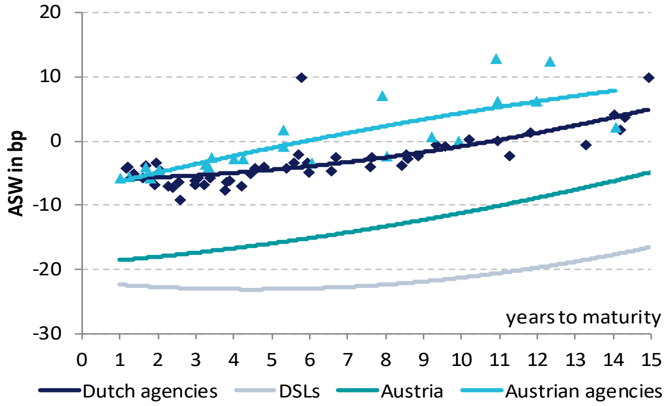
Germany (by segments)



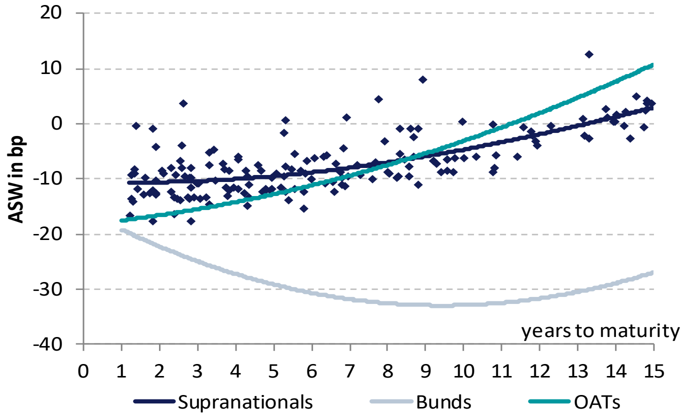
France (by risk weight)



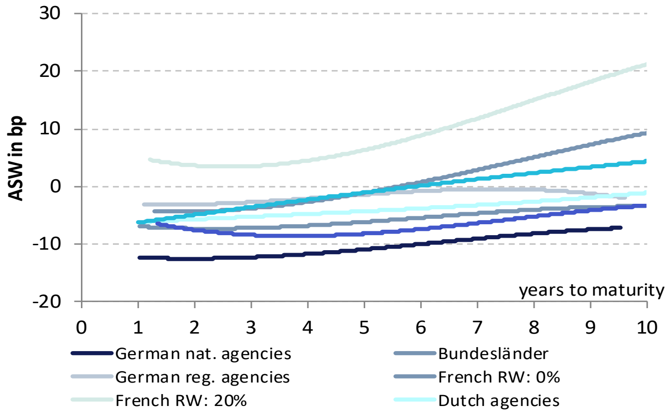
Netherlands & Austria



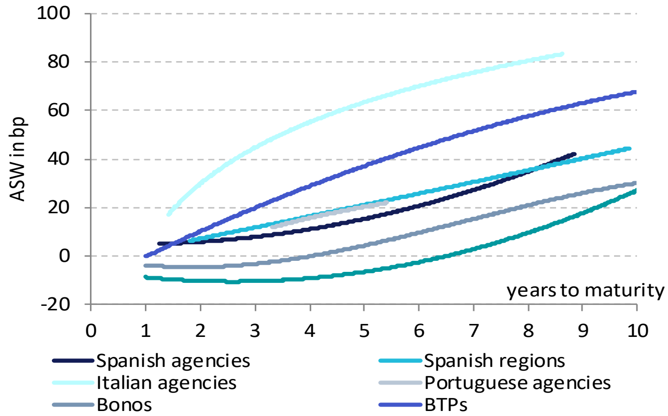
Supranationals



Core



Periphery



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
21/2021 ♦ 16 June	▪ ICMA Green and Social Bond Principles: 2021 update ▪ The covered bond universe of Moody's: an overview Covered bonds vs. senior unsecured bonds
20/2021 ♦ 09 June	▪ PEPP reporting: increased pace of purchases in Q2 ▪ Covered bonds vs. senior unsecured bonds
19/2021 ♦ 02 June	▪ ECB preview: Spectre of inflation fuelling tapering thoughts ▪ FX covered bonds: Same symptomatology as EUR benchmarks?
18/2021 ♦ 19 May	▪ United Overseas Bank reinvigorates the market in Singapore ▪ Transparency requirements §28 PfandBG Q1 2021
17/2021 ♦ 12 May	▪ ASB Finance opens primary market "Down Under": Our outlook for the rest of the year ▪ Development of the German property market
16/2021 ♦ 05 May	▪ Austria implements requirements of the covered bond directive and harmonises existing legal framework ▪ EIB goes Blockchain
15/2021 ♦ 28 April	▪ EU Taxonomy meets the market for sustainable covered bonds
14/2021 ♦ 22 April	▪ LCR levels and risk weights of EUR benchmarks ▪ NextGenerationEU: NGEU is taking shape
13/2021 ♦ 14 April	▪ Predominant ECB strategy: wait-and-see but remain proactive ▪ PEPP reporting: First year done; a second (at least) now follows ▪ OSFI abandons temporarily increased 10% limit with immediate effect: (in)direct implications for Canadian benchmarks
12/2021 ♦ 31 March	▪ Unusual Q1 and revised supply forecast for 2021 ▪ Collective Action Clauses (CACs)
11/2021 ♦ 24 March	▪ Surprising dynamic: Eurosystem lends EUR 331bn to EMU banks via TLTRO III.7 ▪ German Pfandbrief savings banks in Q4 2020
10/2021 ♦ 17 March	▪ Transparency requirements §28 PfandBG Q4/2020 ▪ Credit authorisations for German Bundeslaender in 2021
09/2021 ♦ 10 March	▪ Moody's covered bond universe – an overview ▪ Oldenburgische Landesbank expands sub-benchmark segment
08/2021 ♦ 03 March	▪ Repayment structures on the covered bond market ▪ ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the year
07/2021 ♦ 24 February	▪ An overview of the EUR sub-benchmark segment ▪ ECB: crowding-out effects take hold ▪ PEPP vs. PSPP: Similarities and differences

NORD/LB:
Markets Strategy & Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuer Research

Bloomberg:
RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2020

Risk weights and LCR levels of covered bonds

Transparency requirements §28 PfandBG

Transparenzvorschrift §28 PfandBG Sparkassen (German only)

SSA/Public Issuers:

Issuer Guide – Supranationals & Agencies 2019

Issuer Guide – Canadian Provinces & Territories 2020

Issuer Guide – German Bundeslaender 2020

Issuer Guide – Down Under 2019

Fixed Income:

ESG update

Analysis of ESG reporting

ECB holds course, but ups the ante – PEPP running until 2022

ECB launches corona pandemic emergency

ECB responds to corona risks

Appendix
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Sales

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Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Laender/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

Sales Wholesale Customers

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150

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Additional information
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Issuer / security	Date	Recommendation	Bond type	Cause